What Purpose Do Corporations Purport? Evidence from Letters to Shareholders

Raghuram Rajan Pietro Ramella Luigi Zingales

University of Chicago

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Abstract

Using natural language processing, we identify and categorize the corporate goals in the shareholder letters of the 150 largest companies in the United States, from 1955 to 2020. Corporate goals have proliferated during this period from an average of two in 1955 to almost 10 in 2020. We find a variety of factors are associated with a corporation stating a specific goal including advertising a firm's strengths, promising improved performance, signaling a commitment to specific constituencies, building societal legitimacy, and conforming to the behavior of other corporations. In spite of the proliferation of corporate goals, executive compensation is still overwhelmingly based on shareholder value, as measured by stock prices and financial performance. Yet, we do observe the rise in bonus payments made contingent on social and environmental objectives, especially among the signatories of the 2019 Business Roundtable statement on corporate purpose.

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Since the 1932 Harvard Law Review debate between Merrick Dodd and Adolf Berle, myriad articles have been written on the goals corporations should pursue. Less attention has been dedicated to the positive question of what goals do corporations actually end up pursuing. Even less attention has been dedicated to the questions of what goals managers *declare* they want to pursue, why they do so, and with what consequences. These are the questions we try to address in this paper.

The questions are relevant to the debate on the purpose of the corporation, which gained fresh life recently when 181 CEOs of America's largest corporations belonging to the Business Round Table (BRT) signed a joint statement about corporate purpose. This BRT statement in 2019 was celebrated as a major departure from the BRT's 1997 statement that the objective of the corporation was to make profits for shareholders.[1] Yet, in many ways, it was a reversion to the BRT's 1981 statement that the management of a corporation "requires an understanding of the corporation's many constituencies and their various expectations".[2] Why did the BRT first flip then flop? Did the BRT statements change how corporations saw their objectives? Or did they reflect what corporations already expressed? And did these statements affect anything of consequence, or were they just statements backed by little of relevance, as claimed by Bebchuck and Tallarita (2020, 2022)?

To shed light on these questions, we rely on the longest consistent form of corporate communication: the letter the head of the corporation writes every year to shareholders to introduce the annual report. This form of communication predates mandatory disclosure and it is still in vogue among the vast majority of large corporations. We collect the shareholder letters of the Fortune-ranked top 120 largest non-financial U.S. corporations by revenues and top 30 financial corporations by assets from 1955 (the first year the Fortune ranking was published) to 2020. To read these letters and identify the goals we use the latest techniques in Natural Language Processing (NLP), which allow us to identify which sentences in letters express a goal and what goals are conveyed in those sentences.

We start by documenting the time series of goals. In 1955, only 60% of the letters contained an explicit goal. Conditional on having a goal, the average number of goals was three. By 1980, 85% of the letters contained a goal and the average number of goals was four. By 2020, almost all letters contain a goal and the average number of goals is nine. Thus, the period could be divided into two: the early years from 1955 to 1980 when the expansion of goals was on the extensive margin, and the later years (1980-2020) when the expansion was on the intensive margin.

In the early years of our sample, only 40 percent of the companies included some form of an increase in the corporate bottom line as a goal, and none explicitly mention the idea of shareholder value maximization. By the mid-1990s, virtually all companies had one of their goals as the need to increase the corporate bottom line, while roughly 40 percent specifically included a mention of shareholder value maximization. Interestingly, though, there was not only a rise in the shareholder value movement in the 1980s, but also a rise in the attention paid to other stakeholders. Between 1980 and the end of the 1990s the percentage of companies including one or more non-shareholder stakeholders as an objective increased from 60 percent to 90 percent. Finally, the attention paid to broader societal goals, such as the environment and diversity, steadily increased from 20 percent of firms in the 1980s to 90 percent in 2020.

[1] https://fortune.com/longform/business-roundtable-ceos-corporations-purpose/
[2] Business Round Table 1981 statement.

What drives these changes over time? Chairmen can use the letter (1) to advertise their firm's strengths; (2) to promise better performance; (3) to signal their commitment to favor specific constituencies; (4) to build legitimacy by responding to changing societal demands and; (5) to simply conform to the behavior of other corporations. In this first pass, we will focus on the correlations in the data, exploiting the panel nature of our data wherever possible.

We find that firms do use statements of objectives to signal attributes. For instance, firms that do a lot of R&D or have a strong patenting record tend to espouse product innovation as a goal. Underperforming firms are also more likely to adopt the metric they are underperforming in as a goal. Companies underperforming in terms of profitability or market valuation (Tobin's Q) are more likely to adopt shareholder value as a goal. Companies that are more highly leveraged, announce risk management as a goal, while companies that are fined by the Environmental Protection Agency are more likely to declare some environmental goals afterward.

The need to commit to specific constituencies, perhaps because of outside pressure, also matters. We document that the pressure coming from takeovers and the 30 percentage-points increase in institutional ownership can explain up to one third of the post-1980 increase in shareholder value as a goal. Yet, we do not find strong positive correlations between these pressures and the proliferation of other goals, suggesting institutional ownership cannot account for the surge of stakeholder goals after 1980, and of social goals after 2000. These changes are better explained by changes in society: when terms like "accounting fraud" surge in the public discourse (as measured by the Google NGram index), so does the objective of ethical behavior in shareholder letters. Similarly, the frequency of environmental goals grows in lockstep with the proliferation of terms like "climate change". Of course, both corporations and society may both be responding to signal events that change public consciousness rather than being influenced by each other. Nevertheless, it may be hard for a corporation to be out of synch with the public mood (and with each other).

Seen in this light, it may be a mistake to see statements by organizations like the Business Round Table as presaging a significant change in corporate behavior. In 2019 (when it sanctified a broader emphasis on stakeholders), most corporations already recognized the interests of various stakeholders in their objectives. In 1997 (when it emphasized shareholder value), virtually all corporations had already included it as one of their goals. And in 1981, when the BRT suggested broader objectives than just the shareholders' interests, the proliferation of objectives had already started, though it really took off in the 1980s.

The natural question then is whether these goals are purely cosmetic, intended to pacify some internal or external constituency, or whether they do trigger real change inside the companies that adopt these goals? To explore this issue we rely mostly on the last 15 years, where we have better data to tease out the possible effects. In particular, from 2008 we have detailed data on compensation and compensation philosophy. We document that, in spite of the proliferation of goals, approximately 96 percent of top executives' variable compensation is linked to stock prices and other financial measures of performance. While the use of non-financial metrics to determine compensation has increased, from 30% of the companies in 2008 to 45% in 2020, these measures on average impact only a tiny fraction of the compensation.

We find that the presence of environmental, societal, and community goals in the shareholder letter is associated with the use of the corresponding metrics in compensation. This is not true in general for other goals. One interpretation is that companies' catering to stakeholders is just a promotional effort. Yet, it would be hard to explain why they seem to take the environmental and societal goals more seriously. Another interpretation is that the pursuit of the interest of key stakeholders is not seen to be in contradiction with that of pursuing shareholder interests, as recently emphasized by

Blackrock CEO Larry Fink.[3] In contrast, pursing environmental or societal goals may be in conflict with shareholder value maximization, hence the need for specific incentives in this direction. Consistent with this latter interpretation, we find that companies that emphasize environmental goals (and compensate accordingly) also have better ESG scores, as measured by Sustainalytcs. Finally, we find that companies whose CEO signed the Business Roundtable Statement exhibit a larger increase in the use of non-financial metrics in compensation than companies whose CEOs did not sign, suggesting it is not entirely cheap talk.

Last but not least, we look at whether stated goals are correlated with long-term performance, measured as survival, growth, profitability, and stock return, over a horizon of five and ten years. To control for company and time variability, we control for industry and time fixed effects and for the starting level of profitability and leverage. We find very little evidence that a focus on shareholder value is associated with higher shareholder value, either in the form of profitability or stock return. By contrast, a focus on shareholder value tends to be associated with lower growth, whether this is measured in assets or sales. A focus on stakeholders is correlated with a reduction in profitability, while a focus on the environment is surprisingly correlated with an increase in profitability. Pending more detailed analysis, these results should be interpreted with caution.

Turning to the literature, there are a number of papers in finance that use NLP for other purposes. Hoberg and Phillips (2016) use it to determine the degree of competition in an industry, while Cohen et al. (2020) use it to predict stock returns. To the best of our knowledge, we are the first paper using NLP to identify corporate goals.

There is also a small literature looking at shareholder letters. Mooers (2020) conducts an informal analysis of all Shareholder Letters from Warren Buffett and Jeff Bezos and concludes "the shareholder letters of both men do a fantastic job of communicating the plans, goals, successes, and failures within their companies." The closest paper to ours is Zaccone et al. (2021). They show that during the period 2011-2019, a CEO's use of shareholder-value language in the shareholder letter decreases the likelihood that a firm is targeted by shareholder activists, while the use of stakeholder-value language increases that likelihood.

Finally, Bebchuk and Tallarita (2020,2022) examine whether the BRT signatories changed anything significant in their addressing of corporate objectives. After examining a variety of corporate documents, the authors argue they did not. Our work suggests two qualifications of their conclusions. First, BRT signatories typically already had corporate statements that emphasized multiple stakeholders, not just shareholders – consistent with the proliferation of objectives in recent years. Second, we do find that the role of non-financial metrics in managerial compensation does increase in BRT signatories, suggesting signatories may indeed have been more open to change.

The rest of the paper proceeds as follows. Section 1 discusses the purpose of shareholder letters. Section 2 describes the data, while section 3 the methodology. Sections 4 presents the time-series results, Section 5 studies the possible determinants of the goals CEO present in their letters. Section 6 looks at whether CEOs walk the talk contained in their letters. Section 7 explores the long-term consequences of adopting a purpose. Section 8 concludes.

1. The Sample

[3] https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter

We want to analyze the objectives that large companies in the United States claim they are working for in the years since 1955, understand why a company picks a specific objective, and what effect such a choice has. To this end, we need to identify both a homogenous sample of large U.S. companies over time and a set of comparable and accessible documents where companies state their objectives.

1.1. Sample

To find a homogenous sample of large US companies over time we rely on Giuliano et al. (2022). They collect data on the largest 120 non-financial companies by sales and the top 30 financial companies by assets between 1900 and 2020. We restrict our attention to the period 1955-2020, when their classification is entirely based on Fortune rankings. The list of companies in 1955 is based on the 1956 Fortune ranking and so on. Unlike Giuliano et al. (2022), however, we collect this information every year. The list of companies is available in Appendix 1.

If the list of companies were different every year, we would have 9,900 companies (66 years x 150). In fact, we only have 519 companies, because on average companies remain in the sample for 18 years. Of these, 37 are present for at least 50 years, and only 27 for 50 continuous years (see Appendix 1).

1.2 Shareholder letter

At the beginning of the 20th century, publicly traded companies started to voluntarily release some information about their accounts in an annual report. Initially, the annual report was composed of little more than a letter by the President/Chairman to the stockholders, a signed audit opinion, and a few pages of financial statements. For example, the 1911 annual report of DuPont, one of the more prestigious companies of the time, consisted of only 11 pages.

In 1926, the New York Stock Exchange began to encourage companies to issue periodic reports (Jacobson, 1988). As a result, more companies started to adopt this practice. Among the reforms enacted following the 1929 Crash, Section 13 of the Securities Exchange Act of 1934 required companies above a certain size and with a number of shareholders above a certain threshold to file an annual report with the Securities and Exchange Commission (SEC). The precise form of disclosure, Form 10-K, was dictated by the SEC a few years later in the Code of Federal Regulations, Title 17, Section 249.310. Importantly, though, the 10-K differs in some respects from the glossy annual reports that companies distribute at shareholders' meetings. In particular, it does not require a letter to shareholders.

Nevertheless, the annual report grew as it incorporated some of the disclosures mandated by SEC regulations. From 11 pages, the DuPont annual report grew to 37 pages in 1937, 44 pages in 1947, and 48 pages in 1955. By the beginning of our sample in 1955, it was a well-established practice for U.S. companies to issue an annual report starting with a letter of the Chairman or the President. In fact, we could not identify any annual report without a shareholder letter until 1969.

In 1984, however, the SEC started a pilot electronic filing system called Electronic Data Gathering Analysis and Retrieval (EDGAR). As of fall 1995, more than 92% of all public companies were filing with EDGAR.[4] Companies, however, file the 10K with EDGAR, not the glossy version of the annual report. Consequently, we do not rely on the

[4] https://help.edgar-online.com/edgar/history.asp?site=pro#:~:text=In%201984%2C%20the%20SEC%20allocated,get%20the%20information%20it%20needed.

EDGAR filings but instead, look for electronic or microfiche versions of the glossy annual report. With the diffusion of electronic filings, however, the popularity of the glossy annual report has diminished. In some cases, the annual report became a 10K preceded by a letter to shareholders, in others, even the letter disappeared.

In short, with the emergence of electronic filings, the number of annual reports without an opening letter increased (see Figure 1), but remained limited to less than 10 over 150. It is only in the last decade that this number increased substantively, between 20 and 25. When we asked one of these companies, Apple, why it stopped producing a letter, the investor relations office replied that they stopped the practice in the interest of "saving time, money and the environment".

At the same time, corporate reporting has exploded in the last decade. For example, in 2011 Walmart only had an annual report. In 2012, it added a Global Responsibility Report, in 2013 a Diversity and Inclusion Report and a Workforce Diversity Report, and in 2014, it also added a Global Compliance Report. Finally, for the fiscal year 2020 Walmart differentiates between the annual report and the "digital enhanced" annual report. The Annual Report is just the 10K, while the "digital enhanced" annual report contains a letter from the President & CEO, followed by a letter from the Chairman.

1.3. Shareholder Letter: Details

As Giuliano et al. (2022) show, until 1955 the top executive positions in American companies were President and Chairman. Only in the mid-1950s (i.e., at the beginning of our sample period), did the figure of CEO start to emerge. By the end of our sample period, all the companies have a CEO, who is often the Chairman and sometimes the President.

For the purposes of our study, we define the letter to shareholders as a message at the beginning of the annual report that ends with the signature of a top executive. Generally, this message starts with a salutation ("To the Shareholders"; "Dear Stockholders"; "President's message"; "A message from the Chairman"; ...), but we do not impose this as requirement, since we observe many signed messages that do not start with any salutation.

Annual Reports may contain zero, one, or more letters. If there are multiple letters, they are generally presented in order of importance of the signer. Thus, in the early years, the first one is the Chairman's letter, in later years the CEO's letter. For every year when at least one letter is present in the annual report, we collect the first letter and the rank of who signs it.

As the "letter to the shareholder", we only consider the letter presenting the annual report, not the one introducing the proxy statement. [5] In some cases, this distinction is subtle. For example, PayPal in 2020 combined the proxy statement and the annual report in one single file, with a letter introducing both. Since the proxy statement precedes the annual report, the Chairman & CEO letter technically precedes the proxy, not the annual report. When we compare this letter with the two distinct letters that in the previous year preceded the annual report and the proxy statement, we found that the 2020 letter was signed by the same person and was constructed in the same way as the 2019 letter preceding the annual

[5] In recent years, even proxy statements (documents containing the information companies are required to provide to shareholders so they can make informed decisions about matters that will be brought up at an annual or special stockholder meeting) contain letters. When the letter exists, it typically tends to focus on the governance issues, not on corporate objectives and performance.

report. Thus, we feel confident in classifying this letter as a letter to shareholders. Fortunately, ambiguous cases like these are few and limited to recent years.

As Nickerson and de Groot (2005) describe, there is a typical format for the shareholder letter. After the salutation, it continues with some description of the macroeconomic situation and then quickly moves to corporate performance (financial and otherwise). Then, it speculates about future performance, providing future objectives and business strategies. Traditionally it ends thanking the workforce and shareholders, followed by announcements about board changes. Our focus is on stated corporate objectives or goals.

1.4. Sample Details

The full sample would be 9,900 company years. We lose 101 firm years because some large corporations, such as the food and agriculture company Cargill and the mortgage giants Fannie Mae and Freddie Mac (after they were taken over by the government from 2008 onward) are not publicly traded (see Table 1). We lose another 389 company years because the companies released an annual report that did not contain the traditional letter to shareholders. For the potential sample of 9410 company-years, we search for all the companies' annual reports from Mergent Archive, ProQuest, corporate web sites and the University of Chicago Library. Of the remaining firm-years, we were able to collect the letter for 94% of them. Note that this is an average. In the early part of the sample, we were able to collect letters for 98% of the sample (see Table 1).

Using the historical names in Fortune and the level of sales (assets) reported in Fortune, we match this sample with Compustat. We require companies to have the same name, and sales (assets) within 5% of the level reported on Fortune. We are able to identify 8,174 company-years. The main reason why some companies may remain unmatched after this procedure is because Compustat is very sparse in the period 1955 to 1968.

2. What we can learn from shareholder letters

2.1 The Audience

Who is the audience for shareholder letters? One answer comes from the initial salutation. In 1955, 70% of the letters start with a salutation, "Dear shareholder (stockholders, shareowners)," 22% with a salutation to the Board, and 8% of the letters with a salutation that includes also employees and/or customers. Thus, it is clear that these are important audiences as well. When we repeat the exercise in 2020, the results are very similar: 73% of the letters start with a salutation to shareholders, 19% to the Board, and 5% to employees and customers, suggesting the audience is similar.

While the main groups addressed have not changed much over the 66 years of our sample period, their nature has. In 1955, most of the shareholders were individuals, in 2020 they are institutions. In 1955, the employees were mostly unionized American workers, now they are typically not unionized, and are more global. In 1955 customers were largely American, today they are from countries across the world.

Yet, as Sikes (1986) claims: "The audience for annual reports extends beyond stockholders and employees. Executives use them as calling cards, salesmen as credentials, personnel departments as recruiting tools, and financial

analysts as a means of evaluating a company's performance." What Sikes says for annual reports (also see Hyland (1998)) applies a fortiori to the shareholder letter, which comes at the beginning of the annual report and is unencumbered by regulatory requirements. Thus, we concur with Lee's (1994) view that "corporate executives use annual reports as part of an image management function to influence external stakeholders", where among external stakeholders we also include the government and the regulators. For example, in 1980 the CEO of GTE writes "GTE has taken an active role in pressing for accelerated methods of recovering capital by U.S. telephone companies, both through changes in regulation and tax legislation. Only in this way will we be able to use most effectively new technologies that will make possible a variety of new service offerings at reasonable rates. We have carried this message to the Congress and various regulatory commissions during the past year and will continue to do so in 1981."

The letter can also be used to influence public opinion against specific stakeholders, for instance to spin internal labor disputes to management's advantage. For example, in 1959 Caterpillar CEO writes "Once again the ability and capacity of the Company to produce needed machinery, to employ people, to reward shareholders, and otherwise to add to the total sum of national wealth has been curtailed by labor-management disputes."

2.2 Why state an objective or purpose?

Fisch and Solomon (2021) claim that corporate purpose is "a means that allows corporate participants to signal, monitor, and manage their expectancy interests. Purpose identifies the metrics by which managers are to be held accountable. Purpose also informs stakeholders as to the degree to which they must seek alternative mechanisms to protect their claims through contract or regulation." Even if stated objectives are not entirely cheap talk, we need to understand why CEOs might want to state specific objectives at particular points in time. Five possibilities are: (1) Advertising the firm's strengths; (2) Promising better performance; (3) Signaling a commitment to favor specific constituencies; (4) Building legitimacy, including responding to societal change; (5) Conforming with the prevailing business norms.

2.2.1 Advertising the firm's strengths

CEOs want to focus attention on the company core strengths, perhaps to attract the right employees, customers, or even shareholders. For instance, firms that want to show that they are on the frontiers of technology might espouse innovation as an objective. "Our 3 M Acceleration initiative is a pure growth initiative. Our objective is to improve what 3 M does best - innovation and new product development. Our goal is to double the number of qualified new 3 M product ideas and triple the value of products that win in the marketplace … These changes build on an already strong foundation in our technology and new product development, while also preserving a culture of creativity, teamwork and business building" [3M, 2003].

2.2.2. Promising changed performance

Very often, some company specific adverse event, like a sharp drop in profitability, an industrial accident, a law suit or regulatory penalty, or a product recall will put pressure on management to do better. One way to emphasize the commitment to do better is to set an objective – for instance, to emphasize the firm's concern for the environment and to

set lofty environmental goals after the firm has been fined by the EPA for violations, or to emphasize the importance of risk management and reducing debt if the firm is highly levered.

Social and environmental goals are often announced in response to law suits. For example, Coca Cola in 2000 writes "Your Company is energized with a new entrepreneurial operating culture, fueled by the twin engines of innovation and diversity. We've begun to redefine ourselves as the world's leading marketing and brand-building enterprise. And while we worked to put behind us a difficult discrimination lawsuit, we resolved that we will strive to create the world's most diverse workforce."

2.2.3 Signaling a commitment to favor specific constituencies

Some objectives – like innovation -- tend to benefit all stakeholders. Others, like cutting costs or increasing workers' safety tend to favor one constituency, sometimes at the expense of another. CEOs sometimes have to state management's preferences, depending upon the strength of internal and external pressures. To the extent that a group is critical to firm performance, a clear commitment, verified by the firm's actual choices, could enable it to build a reputation for favoring that group of stakeholders. In turn, that group would be motivated to favor the firm. For example, the CEO of Freeport-Mcmoran Copper & Gold in 2009 writes "The safety of our workforce is our highest priority. Our programs are designed to achieve a safe environment for all our workers." The firm's safety record can be monitored by workers, and any gaps between the lofty ambitions and the actual performance highlighted.

During our sample period, there are three relevant shifts in the power of external constituencies. The first is the reduction in the percentage of unionized workers. The second is the rise in the 1980s of hostile takeovers. The third is the rise in institutional ownership. While in 1980 only 40% of stocks were held by institutions, by 2020 70% is held by institutions.

2.2.4. Building Societal Legitimacy

Even when Friedman (1970) states that managers should "make as much money as possible" adds "while conforming to their basic rules of the society, both those embodied in law and those embodied in ethical custom." Thus, firms are embedded in society and often feel the need to articulate a larger purpose that conforms to the norms of the society they live in. For example, in 2006 Microsoft states that its "defining mission is to help people and businesses realize their full potential", while in 2021, P&G defines its purpose thus: "We will provide branded products and services of superior quality and value that improve the lives of the world's consumers, now and for generations to come."

Commitments can be more specific and in response to events that change society's views or draw its attention to hitherto overlooked issues. Thus, it is not surprising to see renewed statements about ethics after the Enron accounting fraud. "Maintaining uncompromisingly high ethical standards has always been a hallmark of Caterpillar" writes its CEO in 2004. Commitments to clean up emissions and discharges increased in response to rising concern about pollution: "Gulf, and many other elements of the oil industry, recognized the importance of abating pollution and undertook to do something about it many years before it became front page news." (1966).

Calls for diversity and inclusion increased in the 1960s with the civil rights movement. For example, American Home Products Chairman, William F. Laporte, explains in the shareholders' letter of 1970: "We continued to take positive action in providing increased employment opportunities for minority groups, in raising the education levels of

employees and in other vital areas of social concern. Our affirmative action plans and programs have been reviewed and approved by appropriate governmental agencies. Our work force includes many nationalities, religions, races and ethnic backgrounds, working in an environment which offers equal opportunity to all. Our education assistance programs provide opportunity for personal growth and development, while our matching grants program offers aid to the various educational institutions in which our employees have an interest“. However, attention to diversity waned subsequently as the public’s attention shifted.

These calls for diversity and inclusion have increased once again recently, after the heightened attention to issues of racial disparity, especially after the tragic murder of George Floyd in 2020. Apart from direct statements about enhancing diversity and inclusion, some CEOs signaled their desire to do better in other ways. For instance, the IBM CEO said “Being a responsible steward of technology is core to IBM culture and has never been more important than it was in 2020”, and followed by announcing in his shareholder letter that IBM would “abandon facial recognition software, prompting other tech companies to follow.”

Environmental sustainability has also increased recently as a public concern. Hence, “We are committed to protecting the Earth's natural resources and are well on our way to meeting our public goals for meaningful reductions in water, electricity, and fuel usage… In 2009, we formalized our commitment to water as a human right, and we will focus not only on world-class efficiency in our operations but also on preserving water resources and enabling access to safe water. Our climate change focus is on reducing our carbon footprint, including a reduction in absolute greenhouse gas emissions through continued improvement in energy efficiency and the use of alternative energy sources. We actively work with our farmers to promote sustainable agriculture and we are developing new packaging alternatives in both snacks and beverages to reduce our impact on the environment” Pepsico, 2009.

2.2.5. Conforming

Finally, we have to accept the possibility that some of the stated objectives of companies may be cheap talk, possibly driven by the need to offer a ritual genuflection toward it, as others in the industry espouse such objectives. CEOs do not state objectives in isolation, they often sit on each others’ boards. Deviating from the social norm can carry a big social cost. In 1981 The Business Roundtable (BRT) published a Statement on Corporate Responsibility, which reached the following conclusions: "Their [the corporation's] importance to the well-being and quality of life of the average person has created perceptions and expectations that go far beyond what many considered their historic purpose, which was the creation of goods and services at a profit. … Corporations operate within a web of complex, often competing relationships that demand the attention of corporate managers. The decision-making process requires an understanding of the corporation's many constituencies and their various expectations."

But in 1997, the same institution seems to have changed its mind. “The principal objective of a business enterprise is to generate economic returns to its owners,” it wrote in a white paper. And it stressed, “the paramount duty of management and of boards of directors is to the corporation’s stockholders; the interests of other stakeholders are relevant as a derivative of the duty to stockholders.”

By 2019, the tide seems to have turned back again. In a highly publicized statement, BRT declared that “While each of our individual companies serves its own corporate purpose, we share a fundamental commitment to all of our stakeholders.” Yet as Bebchuk and Tallarita (2022) suggest “the BRT Statement was mostly for show and that BRT

Companies joining it did not intend or expect it to bring about any material changes in how they treat stakeholders". We will examine this hypothesis in more detail.

2.3. When do Firms Alter Objectives

So when do firms alter/emphasize specific objectives, given the above rationales? Certainly, they should respond to poor performance or regulatory violations. They will respond to specific pressures from stakeholders such as that of institutional shareholders or takeover threats. They will respond to important corporate events such as Enron or the Global Financial Crisis, and react to societal events or changes in societal beliefs towards issues like climate change or diversity and inclusion. In what follows, we will look for evidence that they do this. We will then see if such statements make a difference in how the firm acts, how management is compensated, and whether it affects overall firm financial performance.

3. Methodology

We now turn to how we determine corporate goals, purpose, or objectives (for the rest of the paper, we will use these words interchangeably) from the letters.

3.1 The Challenge

Shareholder letters often contain very clear statements of purpose. For example, a sentence in Monsanto Chemical letter in 1958 reads "Management's prime objective has been, and is, to better the return on the company's invested capital." Yet, not all goal sentences are so clear-cut. For example, in 1979 Ralston Purina's CEO writes: "Our Company continues to address social challenges with special emphasis in communities where we conduct our operations. By assisting traditional nonprofit organizations as well as smaller, newer groups, we have maintained our voluntary commitment to help those in need become stronger economically, educationally, medically, and culturally. While our activity cannot by itself solve all problems, we believe our efforts represent the sort of voluntary action which American business must pursue. We pledge to contribute toward that goal because its attainment is in the best interest of the nation and the Company."

Since we have nearly 9,000 letters, it would be very time-consuming to read them all to extract the goal sentences. Furthermore, this process would be subject to a high degree of arbitrariness. Thus, we have to use some form of Natural Language Processing (Gentzkow et al., 2019). To analyze shareholder letters with any NLP technique, first we have to break up the letter into manageable portions. Goals are often discussed throughout a paragraph (as in the Ralston Purina statement above), thus we would lose valuable information if we broke the letter into constituent sentences without noting the link between sentences. We, therefore, divide the collected shareholder letters into paragraphs, where the end of a paragraph is demarked by the presence of a period, exclamation mark, or question mark, followed by a new line. We count on average 25 paragraphs per letter (see Figure 2).

NLP techniques generally require large amounts of labeled data for training. Unfortunately, we do not have any pre-labeled data on what constitutes a goal, and the process of labeling sentences is time-consuming. Thus, we need a technique that works well even with a limited quantum of labeled data.

Devilin et al. (2018) developed a machine learning technique for NLP pre-training with unlabeled data called BERT (Bidirectional Encoder Representations from Transformers). A simple description of this technique is contained in Kolbel et al. (2020). The idea is to pre-train a model to recognize the syntax of the English language using a vast amount of data. For pre-training, BERT uses BookCorpus as data input, a dataset consisting of 11,038 unpublished books from 16 different genres and 2,500 million words from text passages of English Wikipedia. Fortunately, this very computationally expensive task has already been done by Google and the pre-trained model can be found on the Python library HuggingFace.

Our first step is to classify a sentence as a goal or not a goal. For this purpose, we rely on the BERT-Base uncased model, with 12 layers and 110M parameters. We further pre-train BERT on the corpus of all shareholder letters, with the learning rate (the step size of the optimization algorithm) set to 10^(-5) and the remaining parameters set to the default values suggested in the HuggingFace Library. This step is termed the In-Task further Pre-Training (ITPT-BERT) step. Finally, we initialize a model for binary text classification with the In Task Further Pre-Trained BERT model weights, and randomly initialize the classification head. The classifier takes a text sequence as input, feeds it to the ITPT Bert model, and finally into a Feed Forward Neural Net, and outputs a 2-dimensional numerical vector, which we can interpret as the probability the input text fits into one of the 2 categories: goal or non-goal.

3.3 Labeling Goal Sentences

The classifier should distinguish paragraphs containing goals from paragraphs that do not. Thus, we randomly sample 3000 paragraphs (46 for each year up to 2019) that contain at least one word likely to indicate a goal. These key words are: 'aim', 'anticipate', 'expect', 'forecast', 'forward', 'intend', 'likely', 'ought', 'plan', 'predict', 'project', 'seek', 'ought', 'outlook', 'target', 'future', 'forthcoming', 'hope', 'ahead', 'optimistic', 'opportunity', 'mission', 'vision', 'strategy', 'goal', 'objective', 'expansion', 'develop', 'development', 'commit', 'purpose', 'milestone', 'core'. The classifier also needs to see paragraphs that have nothing to do with the corporation's objectives. For this reason, we randomly sample 1500 paragraphs, 23 for each fiscal year, from the subsample that does not contain any of the tokens mentioned above.

The three authors independently read and classified each of the 4,500 paragraphs as to whether they contained goal sentences or not. Then, we met and ironed out the differences to arrive at a consensus. A paragraph is labeled as a goal paragraph if it contains a sentence or sentences explicitly stating a corporation's goal. These paragraphs generally contain an expression of intent toward an objective, like "we strive to achieve ...", "we must work to improve ...", "Unwavering commitment to ...", "This planning is aimed towards ...".

We debated what to do with paragraphs celebrating results, such as "the company achieved record highs in ...". These paragraphs implicitly indicate what enters positively in the firm's utility function. Nevertheless, we decided not to include such paragraphs as goal paragraphs; At some level, anything that makes it into the shareholder letter is what the management think is worth emphasizing, so we need to insist on clearer statements of intent rather than to deduce them implicitly. Other paragraphs labeled “non-goal” include purely descriptive paragraphs, which describe the business, the results, the board, or the macroeconomic situation.

At the end of the letter, it is common for the CEO to thank employees, shareholders, customers, and other stakeholders. We adopt the convention that if the sentence simply praises employees' contribution to the company business, we mark the paragraph as a non-goal. Conversely, if the sentence indicates that the company intends to benefit

the stakeholder – for example, by actively investing in training and developing the employees -- we label it a goal paragraph.

We use 3,375 paragraphs to train our initial binary classifier (classifying paragraphs into the binary categories of "goal" and "no goal") and 1,125 to test it. The binary model is unbalanced, since the non-goal sentences vastly exceed the goal ones. Thus, we weight the loss function by the inverse of the frequency of the categories.

As Figure 3A shows, this model has good performance metrics. The overall level of accuracy (the fraction of total predictions that are accurate) is 86%. The level of sensitivity (the fraction of true goals that are identified as such) is 86%, but the level of precision (the fraction of paragraphs predicted to be goal paragraphs that are true goal paragraphs) is low (61%), because the number of true goal paragraphs the model encounters in its training phase is low (233). We have one more step, however, which will mitigate this problem.

3.4 Labeling the Types of Goal

Our ultimate objective is to determine the specific goals management declares it is working toward. So we now train a different classifier, which assigns any goal sentence to any of 13 goals, which we identified from reading 500 paragraphs. There are broadly four themes for these goals. The first goal (as also the first theme) is when the paragraph states that the company is maximizing profits, return on investment, or more generally, is run in the interest of the shareholder. The second theme consists of enhancing other measures of corporate performance that are to the benefit of the entire company, though not necessarily of the shareholders: the goals here include revenue growth, innovation, and risk management (including debt reduction). Third, the goals could explicitly single out the intent of the company to benefit other corporate stakeholders: customers, employees (where we include also employees' safety), suppliers, the community, and, generically, stakeholders. Finally, there are goals that focus on larger corporate social responsibilities such as emphasizing ethics; philanthropy; ESG (environmental, social, and governance) as related to the environment; ESG as related to diversity and inclusion.

For each of these goals, we extracted a set of seed words (e.g., for employees we used "people", "team", "talent", "partner", "associate"…) that broadly represented that goal. We also looked for synonyms of these seed words so that we would have a comprehensive set of seed words. Then among the paragraphs that the binary classifier predicted to be goals, we extracted the most frequent trigrams (three consecutive words) that contained at least one of the seed words. We manually checked all the trigrams that represented at least 0.001% of the most frequent trigrams used and determined trigrams that expressed a legitimate goal such as "increase shareholder value" while discarding those that did not, such as "consistently high profits". We then isolated the paragraphs within the set classified as goals by the binary classifier that had any of the goal trigrams for this goal. We picked 100 such paragraphs at random from this subset for each goal, thus ending up with 1300 paragraphs. Yet, a paragraph can contain multiple goals. So we read all 1300 paragraphs and manually classified them in all the goal categories they belonged to.

3.5 BERT 2

We added the 1300 goal paragraphs identified in the previous subsection to the 4500 paragraphs, and we re-trained the BERT binary classifier (as always, holding out $1/4^{th}$ of paragraphs to test). Separately, we used the 1300 paragraphs to train and test a multi-label, multi-class classifier (dropping the binary classifier head on the earlier BERT

model), which would classify if a paragraph had any one of the 13 goals or no goal. To identify if a corporate objective we run both classifiers in sequence on every paragraph from the corpus of shareholders' letters, now requiring the binary classifier to classify if a paragraph is a goal paragraph or not, and further, the multi-label classifier to further classify which of the 13 goals are represented. So some of the paragraphs classified as goal paragraphs by the binary classifier will be filtered out by the multi-label classifier if it cannot classify the paragraph into any of the 13 goals.

The resulting confusion matrix using the hold-out test sample of paragraphs is shown in Figure 3b. The overall level of accuracy rises to 89%. The level of sensitivity rises to 90%, but – most importantly -- the level of precision rise to 83%. This is the goal classifier we will use in the rest of the paper.

4. Evolution of Corporate Objectives Over Time

In 1955, 70% of the letters contained a goal. In fact, 60% of the letters had multiple goals (Figure 5a). By the late 1980s, all letters have multiple goals. Conditional of having a goal, shareholder letters had on average of 3 goals in 1955 and 9 in 2020 (Figure 5b). Thus, the increase in the number of goal paragraphs observed in Figure 4 is due to a simultaneous increase in both margins: more firms having at least one goal and more stated goals per firm stating goals.

Consider an example of the proliferation of corporate objectives by the end of the sample: In 2017, International Paper stated (and we summarize here)

- We will continue to lead the world in responsible forest stewardship to ensure healthy and productive forest ecosystems for generations to come.
- We make sustainable investments to protect and improve the lives of our employees
- We mobilize our people, products and resources to address critical needs in the communities where our employees live and work.
- We work continuously to reduce our global manufacturing emissions.
- We create innovative, sustainable and recyclable products that help our customers achieve their objectives.
- We deliver long-term value for all stakeholders by establishing advantaged positions in attractive market segments with safe, efficient manufacturing operations near sustainable fiber sources.
- We delivered cost-of-capital returns for the eighth consecutive year and generated $2 billion in free cash flow, which enabled us to reduce debt, further de-risk our pension plan…
- Overall, International Paper is well-positioned to create value for our shareowners and other stakeholders

4.1 Shareholder value

Let us now turn to the goal that has been most debated: maximizing profitability or shareholder value. Figure 6a plots the percentage of firms every year that mention some version of enhancing shareholder residual value (such as increasing profits, reducing costs, increasing dividends, enhancing the return on capital, etc.) as a goal in the shareholder letter, conditional on stating at least one goal. In the 1950s, 75% of the companies who mentioned a goal, mention some broad

notion of maximizing shareholder value as a goal. Given that 60% of the firms stated at least one goal, 45% of the firms declared that they want to maximize profits. Using this definition, though, the notion that firms were not maximizing shareholder value before Milton Friedman's article in 1970 seems unfounded. However, the emphasis in the early years was not universal. By the end of the 1980s almost 100% of the firms expressing a goal state some form of profit maximization. Since almost 100% of the firms state a goal in 1990 (Figure 5a), the acceptance of this paradigm is almost universal.

The various ways in which a corporation can be classified as maximizing shareholder value is quite broad under this first classification, though it captures the academic and practical sense of the term. For example, this classification includes firms that state cost minimization as a goal. Starting in the late 1970s and early 1980s, however, finance academics first and practitioners later, developed and spread the idea that share prices captured the full benefits occurring to shareholders today and in the future. Heilbron et al. (2014) find that the first use of the term 'shareholder value' in The Wall Street Journal was in 1965 and that the phrase was used sparingly before 1983. Taylor (2015) find that the first use of the term 'shareholder value' in the ProQuest database of annual reports is in 1965, but he finds a sharp increase in usage frequency beginning in 1983. Thus, in the early 1980s, maximization of shareholder value (sometimes with the qualification "long-term") became the new mantra. For this reason, we create a second definition. Within the goal paragraphs that we classified as "shareholder goals" we look for the words "shareholder" (or 'stockholder', 'share owner', 'stock owner') and the word "value" no more than 30 characters away (example: "Our goal is to return larger value to all General Connecticut's shareholders").[6]

As Figure 6A shows, hardly any firms use the term before 1980. By the late 1990s, nearly 60% of the firms that state a goal (by then almost the universe of firms) have shareholder value as a goal. The peak seems to coincide with 1997 when the Business Roundtable declared this was the main objective of corporations. At the beginning of the new millennium, the percentage of firms with a shareholder value goal drops a bit and hovers above 40% till the late 2010s. In the last couple of years, it drops significantly.

Thus, no matter what definition we adopt, we can see a surge in firms stating shareholder value maximization or versions thereof as an objective between 1980 and the end of the century. It is also important to stress that attention to the bottom line has grown steadily since 1955 as firms pay more attention to objectives. Thus, the publication of Milton Friedman's article does not seem to impact the trend, at least not right away.

4.2 Frequency of Other Goals

Figure 6b plots the percentage of firms that mention one of the three big categories of goals: "corporate performance" (which includes growth in market share, product innovation, and risk management), "other stakeholders" (which includes customers, employees, suppliers, community, and generically, stakeholders), and "society as a whole" (which includes social, environmental, philanthropy, and ethics). These percentages are calculated as a fraction of the firms that expressed a goal, to begin with. In the 1950s, 70% of the firms that expressed a goal expressed a corporate performance goal. By

[6] For robustness, we checked how many paragraphs contained the bigram shareholder value, but were not classified as a goal. Of the 3397 paragraphs with the biagram shareholder value, **175** were not goals and 229 were shareholder value broad goals according to our classifier. When we looked at these paragraphs individually, most of these paragraphs were purely descriptive or refer to the book value notion.

the 1980s, all of them do. At the beginning of the sample, 60% of the firms that state a goal express a stakeholder goal. This percentage remains roughly constant till the 1980s, approaching 100% by the end of the 1990s. This pattern seems inconsistent with the idea that the so-called shareholder revolution of the 1980s leads to single-minded attention to shareholder value. Finally, the percentage of firms that proclaim broader social goals is roughly 10% in the early 1960s, rises to 40% by the early 1970s, then drops again to 10% in the early 1980s. After that, it rises to reach almost 100% today. This rise, however, was not smooth. There was a jump in the late 1980s, a jump in the late 1990s, and then a jump after 2015.

Figure 6c provides a graphic description of the relative frequency of the specific goals, conditional on a firm having a goal. Early on the corporate performance goal (blue bar) is rather dominant. With time, we see the rise of the stakeholders and of late of the social goals. In Figure 6d, we offer further details with the relative share of each of the thirteen goals. In 1955, the three most important goals by relative share are shareholder value maximization, customer focus, and market share growth. Today, all goals, with the exception of supplier focus, have more equal billing.

5. What Drives Corporate Objectives?

In Section 2, we discussed possible reasons why top management wants to emphasize certain goals in their letter to shareholders. In this section, we explore patterns in the data to see if there is any evidence consistent with the hypotheses we advanced. At this preliminary stage of the analysis, we will merely report correlations, without any pretense of testing causality. For reasons of data availability, most of this analysis is concentrated on the period 1980-2020. We start by reviewing the data used.

5.1 Data

Table 2a reports the summary statistics of the various corporate goals. Growth is almost always a goal, as is the broad definition of shareholder value maximization. Innovation and customers also appear very frequently as goals. It is more common to mention employees as a goal than to mention the narrow version of shareholder value maximization.

The summary statistics for measures of profitability, leverage, and R&D expenditures from Compustat are reported in Table 2b. Table 2c presents the definition, the source, and the summary statistics for all the other variables used in the analysis. Takeover Pressure is the fraction of assets in the same Fama-French 30 industry that received at least one takeover bid in the previous year. The data, which span from 1962 to 2001, have been kindly provided to us by Mark Mitchell. The data on EPA Penalties, Cases, and Violations are sourced from the US Environment Protection Agency's Integrated Compliance Information System - Federal Enforcement and Compliance case-wise dataset spanning 1980-2020. Patents and Citation data are obtained from NBER patent data project ranging from 1980-2006. Institutional Ownership data is sourced from Thomson-Reuters and is available from 1980 till 2020. Total ESG score is the company-wise ESG weighted score rated by Sustainalytics with data available between 2010-2020.

Since 2008, U.S. companies have to provide in their proxy statements a detailed analysis of the compensation philosophy, including also a discussion of the key performance indicators used to compute the variable component of the top executives' compensation. We hand-collected these data on the compensation of the top executives from the proxy statements for the years 2008, 2013, 2018, 2020. Table 2d reports the summary statistics for these data. Let us now turn to the drivers of corporate objectives.

5.2 Advertising the firm's strengths

CEOs might use the objectives stated in shareholder letters to advertise the strengths of their firms. Thus, a CEO in an R&D-intensive firm may want to stress the innovation goal to highlight the innovativeness of the firm she manages. Table 3 explores this possibility by studying the relationship between the presence of innovation as a goal in the shareholder letter and various measures of innovativeness, from the level of R&D expense over assets to the number of patents the firm generates or its citation-weighted number of patents. Since financial firms do not invest much in R&D and do not develop many patents, we restrict the sample here to non-financial firms. The first three columns do not include (Fama-French 30) industry-fixed effects, while the last three do. All specifications include year-fixed effects. The specification using R&D expenses as a measure of innovativeness spans the entire sample, while the others span only the period 1976-2006 when patent data are available.

All three measures of innovation are positively correlated with the mention of innovation as a corporate goal. In all three cases without industry fixed effect, the coefficient is statistically different from zero at conventional levels. The insertion of industry fixed effects, however, reduces the magnitude of the estimated coefficients significantly, with only the R&D Expense coefficient statistically significant, suggesting that the correlation is largely industry-specific, not firm-specific. In other words, innovative industries tend to have innovation as an objective.

5.3. Promising better performance

CEOs may use their letter to shareholders to promise to do better on the dimension where they have underperformed. Thus, the CEO of a company that is relatively unprofitable will claim to pursue shareholder value, the CEO of a company that is heavily indebted will promise to reduce debt and to manage its risk better, the CEO of a company in trouble with the EPA will profess her commitment to the environment. In this section, we explore whether this is the case.

Table 4a looks at the relationship between shareholder value goals and profitability, measured as Tobin's Q (columns I and III) or EBITDA over assets (columns II and IV). Once again for comparability, we restrict the sample to non-financial firms. The first two specifications include only year fixed effects, while the last two include both year and (Fama French) industry fixed effects. Regardless of the specification, there is a negative and statistically significant coefficient of the measure of profitability on the probability of mentioning shareholder value as a goal. Thus, more profitable companies and companies with a higher market-to-book value are less likely to state that they want to maximize profits. Interestingly, the industry-fixed effects do not impact much the magnitude of the coefficients, suggesting this is a firm-specific effect, not an industry-specific effect.

In Table 4b we look at the relationship between risk management goal and level of debt, measured as the book value of debt or inverse of interest coverage (Interest Expenses over EBITDA). As before, for comparability, we restrict the sample to non-financial firms. The first two specifications include only year fixed effects, while the last two include both year and (Fama French) industry fixed effects. More highly indebted firms are more likely to mention risk management as a goal. This effect is statistically significant at conventional levels, regardless of the inclusion of industry-

fixed effects. In fact -- as was the case for profitability -- the magnitudes of the coefficients are unaffected by the presence of industry fixed effects, suggesting this is a firm-specific phenomenon.

Finally, in Table 4c we look at the relationship between environmental performance and the presence of environmental goals in the shareholder letter. We use three measures of environmental performance: the amount and number of US Environmental Protection Agency's penalties, and the number of cases registered against a company by the EPA. As the table shows, firms with a bad environmental record in the previous year are more likely to mention the environment as a goal in their shareholder letter.

5.4 Signaling a commitment to favor specific constituencies

Firms might respond to pressure from specific constituencies to indicate a specific commitment toward them. The last two decades of the 20th century witnessed a major takeover wave and a significant rise in the importance of institutional ownership. Both these external pressures took place roughly at the same time as the importance of the narrow shareholder value goal (as well as goals more generally) increased dramatically. To what extent are these two phenomena correlated? To what extent does the identity of the institutions owning share matter? In this sub-section, we try to answer all these questions.

5.4.1 Shareholder Value as a Goal

In Table 5 we explore whether the shareholder value goal is correlated with an increase in institutional ownership. In Table 5a column 1, the left-hand side is an indicator variable equal to 1 if shareholder value (narrow) is present as an objective in the shareholder letter of that year. On the right-hand side, we have the percentage of equity owned by institutions and year fixed effects. There is a positive and statistically significant relationship between the two: companies with more institutional ownership are more likely to state shareholder value as a goal. This effect is not just an industry-specific effect. In fact, in column II we control for industry fixed effects, the coefficient is quantitatively larger. An increase in institutional ownership of 20 percentage points (similar to what took place between 1980 and 2000, see Figure 9) is associated with a 7 percentage point increase in the likelihood of a shareholder value goal. Thus, the effect is economically meaningful, given that in 1980 the shareholder value goal is present only 5% of the time.

In columns III-VI of Table 5a, we re-estimate the regressions after splitting the sample period into two: 1980 to 2000 and 2000 to 2020. The first two specifications are without industry fixed effects, the last two with. The positive coefficient is always present and always statistically different from zero. In the first twenty years, however, the effect seems to be quantitatively smaller than in the last twenty.

In column VIII, we explore a long-term (five-year) difference specification. Griliches and Hausman (1986) warn against the use of short-term differencing (or even fixed effects) in the presence of variables measured with error. If the signal moves slowly and the noise is not serially correlated (as likely in our case), short-term differencing eliminates most of the signal, leaving only the noise. For this reason, Griliches and Hausman (1986) suggest long-term differencing. Following this, we take five-year differences of dependent and explanatory variables. Even in this specification, an increase in institutional ownership leads to a higher likelihood of a shareholder value objective. Interestingly, the size of the coefficient is even larger. Since institutional ownership increased by 30 percentage points from 1980 to 2020, the

coefficient suggests an associated 12 percentage point increase in the use of shareholder value as a goal, 30% of what we observe in practice.

In Table 5b we repeat what we have done in Table 5a, with the difference that on the right-hand side, we include takeover pressure instead of institutional ownership. When we split the sample period, however, we do not have a measure of takeover pressure for the period 2000-2020, so we only estimate the relation in the first subsample. As Table 5b shows, the presence of shareholder value as an objective is positively related to takeover pressure. This is true with and without industry fixed effects and it is true also in the period 1980-2000. In fact, the coefficient is three times as large during that period. The relation is positive and significant also when we do long-term differences, but the size of the coefficient is much smaller. This is consistent with the idea that takeover pressure played a very important role in the last two decades of the 20th century, but not beyond that.

In Table 5c we repeat Tables 5a and 5b, but with both explanatory variables on the right-hand side. The two variables seem to have an independent effect on the probability of mentioning shareholder value in the shareholder letter. Both coefficients are positive and statistically significant at the conventional level. Together with industry and year fixed effects, these two variables are able to explain 18% of the variability in the presence of shareholder value in the letter. The statistical significance persists across specifications. The only exception is the long-term difference specification, where only takeover pressure is statistically significant.

5.4.2 Other Goals

Thus far, we have seen that the pressure from institutional investors and takeovers is associated with companies emphasizing shareholder value in the letter to shareholders. Was this emphasis at the expense of other objectives or complementary? To answer this question in Table 6, we look at the relationship between other goals and institutional ownership. For space considerations, we report only the specifications in level with time and industry fixed effects and the 5-year differences, with only time fixed-effects.

Table 6a shows that a rise in institutional investors is positively related to the presence of risk management as a goal and negatively related to the presence of environment, employees, and community as a goal. The statistical significance of these coefficients, however, disappears when we estimate this relationship in long-term differences and not in levels (Table 6b). Broadly, the correlation between shareholder value objectives and institutional/takeover pressure does not seem to be part of a broader correlation between these pressures and all objectives.

5.4.3 Does the Identity of the Institution Matter?

We have explored the impact of institutional ownership in general. But in recent years some institutions have become much more important than others. As Bebchuk and Hirst (2019) show, the average combined stake in S&P 500 companies held by the Big Three asset management firms quadrupled in the last two decades, moving from 5.2% in 1998 to 20.5% in 2017. Some scholars have claimed that this overlapping ownership may facilitate collusion (Azar et al, 2018). Others (e.g., Quigley, 2019) have argued that this universal ownership will lead institutional investors to internalize most of the externalities produced by specific firms. Thus, a firm dominated by a "universal" owner should be more inclined to incorporate in their objective function both pollution and social effects. Furthermore, some of the CEOs of these large owners, like Larry Fink, CEO of Blackrock, have been very vocal in what they would like the portfolio companies to do

in certain areas, like the environment. Others, like State Street, have publicly announced that they will vote against nominating committee chairs at S&P 500 companies that do not provide board racial/ethnic diversity information and do not have at least one director from an underrepresented community.[7] Thus, large institutional investors differ in their stated goals and they might differ in their behavior because they have different economic incentives. Thus, we explore whether the identity of large institutional investors has an impact on the corporate goals managers proclaim.

In Table 7 we address this question by decomposing institutional ownership into the ownership of each of the top five largest institutional investors (Vanguard, Blackrock, State Street, Fidelity, and JPMorgan) and the rest. For space considerations, we report only the regressions in levels with industry and time fixed effects and the 5-year differencing, with time fixed effects.

Of these two specifications, the results of the 5-year differencing seem more compelling. The reason is that the time differencing cleans the specification of any time-invariant omitted variable, which might bias the estimates. Yet, the differencing might decrease the signal-to-noise ratio, leading to insignificant results. The time differencing, however, does not eliminate all possible endogeneity concerns, since the investment strategy of institutional investors might change over time in a way that is correlated with the presence of some goals, because an institution might want, for example, to increase exposure to environmentally conscious companies. Nevertheless, the three largest institutions have a large part of their portfolio that is indexed, openly or de facto. Therefore, when they experience a large inflow of money, an increase in the share of a company they own is driven primarily by the inflow of money they receive, not by a strategic choice. Since during the period 2008-2018, more than 80% of all assets flowing into investment funds have gone to the Big Three (Bebchuk and Hirst, 2019), the variation in the stake the Big Three own in the various companies could be seen as fairly exogenous. With this distinction in mind, let's look at the level (Table 7a) and the 5-year differencing (Table 7b) regressions.

First of all, we observe a similar pattern between the level and the 5-year difference regressions, not only in the sign of the coefficients but even in their magnitude. As is to be expected, the difference regressions tend to be a bit noisier, so sometimes the magnitude of the coefficient is such that the t-statistic falls below the standard level of significance.

A larger stake of Vanguard in a company is associated with more corporate emphasis on performance-based goals (growth and innovation) and less emphasis on social goals (philanthropy and community). Vanguard "dominated" companies prefer setting a goal towards all stakeholders, not just employees or community. Of all these regressions, only the employee objective is above the standard level of significance in the difference regression.

Blackrock seems to be different from Vanguard. Companies with a larger share owned by Blackrock emphasize growth and innovation less and philanthropy and community more. Blackrock owns larger stakes in companies that emphasize ethics less, although this correlation is only significant at the 10% level in the level regression and not significant in the difference regressions.

A larger State Street stake in a company is associated with more corporate emphasis on innovation, risk management, shareholder value and the various stakeholders (supplier, employee, customers). Companies in which State

[7] https://corpgov.law.harvard.edu/2022/02/09/investors-press-for-progress-on-esg-matters/.

Street invests more also emphasize ethics more. A larger stake of Fidelity in a company is associated with less emphasis on ethics and the environment.

For JPMorgan the results are most in contrast between the level and the difference regression. In the level regressions a larger stake of JPMorgan is associated with less emphasis on risk management. In the difference regression, JP Morgan is associated with more emphasis on ethics, the environment, and social goals. Finally, larger stakes of other institutions are associated with less emphasis on ethics, environment, social goals, and employees.

In sum, the identity of the institution owning a larger share seems to matter on the emphasis companies put on various goals. This is a first pass, which will have to be refined in further analysis.

5.4.4 Other Goals and Takeover Pressure

In Table 8, we repeat what we have done in Table 6 with takeover pressure in place of institutional ownership. Table 8a shows that a rise in takeover pressure does not affect the frequency of other objectives either. In the level regression the only statistically significant coefficient is the one associated with customer goals. While it is possible that takeover pressure reduces a firm desire to invest in the customers long-term, we should not make too much of this coefficient, since the effect disappears when we look at 5-year differences (Table 8b). In contrast, when we look at the 5-year difference specifications, we encounter two significant effects. The first is risk management. This is not that surprising, since takeover pressure tends to force firms to lever up and more leveraged firms are more concerned about risk management. The other is the positive coefficient on innovation. This is strange since the same short-termism argument advanced before should lead firms to advocate less, rather than more, innovation.

5.5 Building legitimacy, including responding to societal change

Thus far, we have seen how takeover pressure and an increase in institutional ownership have led to an increase in the focus of shareholder letters on shareholder value. Figure 6b, however, shows that the frequency of other goals, related to stakeholders and society, has increased as well. The rise in the frequency of these goals cannot be attributed to takeovers and institutional ownership, neither theoretically nor empirically. Thus, what triggered these changes?

One possibility is that companies respond to societal pressure. After all, even Friedman (1970) argued that companies had to conform to the basic rules of the society "both those embodied in law and those embodied in ethical custom." Thus, companies should respond to ethical customs, which might fluctuate over time.

To test this hypothesis we use Google Books Ngram Viewer's frequency of certain terms as an indicator of the sensitivity of society about certain issues. Google Books Ngram Viewer measures how frequently a combination of *n* words (ngram) has occurred in a corpus of books over the selected years.

Figure 7a plots the frequency of the bigram "accounting fraud" in English books between 1955 and 2020 (the scale is on the right-hand side). Not surprisingly, there is a spike in the use of this bigram at the beginning of the new millennium, when the Enron and WorldCom scandals exploded. We superimpose on this graph the frequency of the goal "ethics" in shareholder letters (left-hand scale). Even this series exhibits a spike in early 2000. Not only do the two series spike at the same time, but they also drop at the same time, although the frequency of the "ethics" goal in shareholder letters stabilizes at a higher plateau – once a corporation starts talking about ethics, it may be hard to stop talking entirely in subsequent letters.

In Figure 7b, we repeat this analysis with the bigram "climate change" and the environmental goal. There is a first increase in the frequency of the bigram "climate change" in the early 1990s and then a second spike starting in 2004. The same is true for the environmental goal in shareholder letters.

In Figure 8 we report the results of a more formal analysis. We plot the confidence interval of the coefficients of a time series regression where on the left-hand side we have the frequency of a goal in shareholder letters and on the right-hand side the one year lead, the contemporaneous, and the one year lagged frequency of the related ngram in English books. As the figure shows, the presence of a certain goal in shareholder letters in year t is positively correlated with the frequency of the use of the related term in books a year later. This result makes sense since there is a slight delay in the book publication. Thus, the objectives in the letters seem to rise with the attention paid to them by society.

6. Do CEOS mean what they say?

The letter to shareholders is not part of a corporation's required financial disclosures. Thus, it is not clear what the legal status of the declarations made in them is. We are not aware of any manager being sued for declarations made in the letter, so we should consider the possibility that the letters are just cheap talk. To test this possibility, we look at the correlation between the declarations made by managers in their letters and other consequential decisions and outcomes.

6.1 Compensation

When Joe Biden was Vice President of the United States he used to say: "Don't tell me what you value. Show me your budget & I'll tell you what you value."[8] In the corporate world, an analogous refrain would be "Don't tell me what you value. Show me what you reward your executives for and I will tell you what you value." Thus, in order to determine the true corporate goals, we start from compensation.

6.1.1 Summary Statistics

As Table 2d shows, on average, the fixed salary represents 10 to 12% of the total compensation for the top 5 executives, with another 17 to 20% represented by the annual cash bonus, and the remaining 68 to 73% made up by long-term performance incentives. The long-term incentive plan is solely based on the stock market performance of the company and/or on some other financial measures of corporate profitability. The annual cash bonus, on the other hand, is often linked to a combination of financial and non-financial metrics. We read through the proxy statements and determined whether annual bonuses were linked to non-financial metrics and what percentage of their value was linked to non-financial metrics. As Table 2d shows, between 32 and 45% of the companies use a non-financial metric in the compensation, a proportion that has increased significantly over time (the 2020 level is 50% higher than the 2013 level). While the presence of non-financial metrics is becoming more widespread, the proportion of total compensation that is linked to non-financial metrics is tiny, even if we restrict attention to those companies that do use non-financial metrics: between 3 and 4%.

The finding that only a small fraction of executives' compensations is linked to non-financial metrics is similar to Bebchuk and Tallarita (2020), who analyze the compensation structure for the 20 companies whose CEOs sit on the board

[8] https://twitter.com/vp44/status/562347649429278720?lang=en

of the Business Roundtable. Bebchuk and Tallarita (2020) emphasize that in only 3 companies (15% of the sample) the bonus was "linked to a quantified stakeholder metric". We find that in 2018, 48% of companies have part of the executive compensation based on non-financial metrics. The difference is on the "quantified" element and on the "stakeholder metric" definition. Boeing, for example, in 2018 makes clear that its annual incentive plan is based in large part on individual performance scores, which include "performance with respect to several key leadership behaviors that Boeing believes are critical to business success." As can be deduced from the rest of the proxy statement, these key leadership behaviors are linked to sustainable growth, product development, and leadership skills and will be judged by the compensation committee. Thus, these metrics are non-financial but are not quantified. Even if they were quantified, it is not clear whether Bebchuk and Tallarita would define them as "stakeholder metrics," because they can be ultimately be linked to long-term value maximization.

6.1.2 Corporate Goals and Compensation

Now that we have defined terms, we can analyze the relationship between corporate goals stated in the shareholder letter and the metrics used in compensations. This is done in Table 9a. The dependent variable is the percentage of total compensation linked to a specific metric and the explanatory variables are an indicator equal to one if that metric is mentioned as a goal in the shareholder letter. We also include year indicators.

The compensation metric is positively related to stated objectives in three cases: environment, social, and community. It is also negatively related to a goal linked to suppliers, but in general, suppliers are so rarely referenced that we are inclined to believe this correlation stems from noise. Interestingly, for other goals, we do not observe a relationship between stated purpose and metrics used in compensation. One interpretation of this result is that stated objectives are just a side-show or a form of cheap talk. Another is that performance on non-financial metrics is hard to measure, so companies may fear to compensate on them for fear of creating distortions. A final possibility is that objectives like diversity and inclusion do ultimately contribute to maximizing long-term shareholder value by pushing – for instance – the firm to hire better talent. Therefore, if the top executives are adequately incentivized to pursue long-term shareholder value, there is no need to compensate them separately for diversity and inclusion. In contrast, environmental, social, and community goals are a form of maximization of shareholder welfare, not value (in the language of Hart and Zingales, 2017). These goals, thus, will not be pursued by managers incentivized only with financial indicators of performance. If shareholders want managers to pursue environmental, social, and community goals, they have to compensate them based on environmental measures. Hence, the observed relation between social objectives and the percentage of compensation linked to social metrics.[9]

6.1.3 Compensation and the BRT Statement

While the presence of non-financial metrics is roughly constant between 2008 and 2018, we observe a sharp rise in their presence between 2018 and 2020, especially when it comes to social measures and customer satisfaction (see Table 2d). There are two potential causes of this increase. The first is the publication in August 2019 of a statement on the purpose of a corporation by the Business Roundtable, where CEOs reaffirm their commitment to all stakeholders. The second is the social reckoning following the killing of George Floyd by a police officer. Since only 72 of the 150

[9] In Table 9b we estimate a 5-year difference specification. Unfortunately, the number of observations drops to only 114, thus no coefficient is statistically significant at conventional levels.

companies in our sample signed the Business Roundtable statement, we can test whether the increase in the use of non-financial metrics in compensation is more pronounced in companies whose CEOs signed the joint statement.

Table 10 reports the result of a simple difference in difference regression. The dependent variable is the presence of non-financial metrics in the determination of short-term bonuses. As independent variables, we have an indicator for 2020, an indicator for the signatories of the Business Roundtable statement, and an interaction between the two. As Table 10 shows, for all non-financial metrics, we observe a sharper increase among the signatories of the Business Roundtable statement. This increase is particularly pronounced for those groups of stakeholders prioritized in the Business Roundtable: customers, employees, suppliers, and communities.

Not only is this difference statistically significant, but it is also economically very large. Among the signatories of the BRT statement, stakeholder-based measures of performance are used in 2020 in 72% of the cases vs. 42% before. Similarly, in 2020, social-based metrics are used in 46% of the firms who signed the BRT statement vs. 20% before.

This result may seem in contrast with Bebchuk and Tallarita (2022), who find that the signatories of the BRT statement retained a commitment to shareholder primacy in their guidelines and continued to align executive pay with shareholder value. However, the emphasis towards creating value for stakeholders is not in contradiction with the creation of value for shareholders, as Larry Fink, CEO of Blackrock and one of the signatories of the BRT statement, makes clear in his latest letter to CEOs: "In today's globally interconnected world, a company must create value for and be valued by its full range of stakeholders in order to deliver long-term value for its shareholders."[10]

Second, Bebchuk and Tallarita (2022) focus on the changes in the statutes and the language, but not on the level of the compensation. We focus on the changes in the compensation. Our results confirm Bebchuk and Tallarita's results that compensation is overwhelmingly linked to stock prices and financial performance. Our primary contribution here is to show that post BRT, compensation is linked somewhat more strongly to non-financial metrics for companies whose CEOs signed the BRT statement.

6.2 ESG ratings

Most outcome variables are either noisy or do not capture the full range of what advocates of a specific objective intend. A relatively useful outcome on these dimensions is ESG scores. For example, Sustainalytics rates companies on Environment, Social and Governance (ESG) performance and assigns a score between 0-100 with 100 representing the best possible rating score. If executives walk the talk, we would expect Sustainalytics scores to be higher for companies that state ESG goals in their shareholder letters. More to the point, we expect that companies that emphasize a particular type of goal in the letters should be rated particularly high on that metric. Table 11 tests this hypothesis.

The left-hand side of column I is the total ESG score, as measured by Sustainalytics. The right hand side is an indicator variable equal to 1 if ESG environment is mentioned as a goal. The regression controls for industry and time fixed effects, as do all regressions in this table. There is a positive and statistically significant coefficient of an ESG goal in the letter (column 1).

In column 2, the dependent variable is the score on environmental fines assessed by the EPA (higher fines, lower score). Espousal of the environmental goal seems to be uncorrelated with the fines score. Since our earlier analysis

[10] https://www.blackrock.com/corporate/investor-relations/larry-fink-ceo-letter

suggests that firms espoused the environmental goal after they were fined, this does suggest that they do not continue to offend.

In column 3 we regress the Sustainalytics social score on an indicator variable equal to 1 if ESG social is mentioned as a goal. There is a positive and statistically significant correlation of the Sustainalytics score with the ESG social goal. Similarly, in column 4, there is a significant correlation between the philanthropy goal and the amount of corporate donations, measured as a percentage of earnings. Finally, we do not find any correlation between employee turnover as measured by Sustainalytics and the employee-related goal in the letter (column 5).

Overall, there is evidence that the corporate social goals stated in the shareholder letter translate into a higher performance on those metrics, at least as measured by Sustainalytics.

7. Do Stated Goals Matter?

In the previous section, we have shown that stated goals are correlated with decisions made by the CEO. Thus, the goals reported in the shareholder letter do not appear to be pure cheap talk. In this section, we explore whether the presence of these stated goals makes a difference in the long-term performance. As a measure of long-term performance, we use survival, growth (either in assets or in revenues), profitability, and shareholders' total return, measured over a 5-year horizon. To avoid selection issues, we compute the left-hand side regardless of whether a firm remains in the sample of the largest 150 companies 5 years later. To control for company and time variability, we control for industry and time fixed effects and for the starting level of profitability and leverage. Since the observations are overlapping, we use the Newey-West standard errors. Table 12 reports the results.

Table 12a looks at survival in two ways: avoiding bankruptcy and avoiding being acquired. In column 1 the left-hand side is a dummy equal to one if a company went bankrupt within 5 years from year *t.* On the right-hand side, there are 13 indicators for whether the respective objective is mentioned in the shareholder letter at time t. We also include profitability and leverage of company *i* in year t*,* and control for year and industry fixed effects.

Companies that mention risk management as an objective are more likely to go bankrupt, even after controlling for initial leverage. This result suggests that the mention of the need to manage risk is a good indicator of being at high risk of default. In contrast, companies that mention innovation as an objective are less likely to go bankrupt within five years. This correlation might capture some intrinsic characteristic of a firm not captured by other controls (for instance, innovative firms take on little debt throughout their lives, something not captured fully by initial debt levels). Not surprisingly, companies that are more profitable at year *t* are less likely to go bankrupt within five years.

In column 3 the dependent variable is a dummy equal to one if a company is acquired within 5 years. Advocating shareholder value as a goal does not seem to reduce the chance of being acquired. In contrast, stating as objectives the environment, philanthropy, and suppliers seem to reduce the probability of being acquired.

Table 12b looks at measures of growth and profitability. Companies that announce a risk-management goal grow less and so do companies that announce a shareholder value goal, at least in the narrow sense. Revenue growth seems to be negatively affected by risk management and by all the social and stakeholder goals (ESG social, ethics, stakeholders, customers), but positively affected by employee goals. The cumulative stock return is uncorrelated with all the right-hand side variables. Finally, accounting profitability is negatively related to risk management as a goal, stakeholder as a goal, customer as a goal, and positively related to ESG environment as a goal.

In sum, there is no evidence that a focus on shareholder value is detrimental to profits, survival, or stock market returns. There is only some evidence that focusing on shareholder value might reduce the growth in assets over a five-year horizon. At the same time, there is no evidence that the adoption of a shareholder value objective increased profitability or stock returns.

8. Conclusions

The prevailing narrative has it that during the 1950s and 1960s public corporations were exercising corporate power "in a self-restrained and socially responsible manner" (Cheffins, 2020), that "shareholder primacy took off in the 1970s, starting with a Milton Friedman essay in The New York Times" (Indap, 2018), and that the 2019 BRT statement on corporate purpose has represented "a major philosophical shift" (Benoit, 2019).

The picture that emerges from our analysis of shareholder letters over more than 60 years is more nuanced. Even in the 1950s and 1960s, the primary goal expressed by corporations was to increase their profits. If anything, this goal has been squeezed over time by the proliferation of other goals. The main novelty of the 1980s is that the goal of increasing profits is expressed in terms of maximization of shareholder value. We document that the adoption of this terminology was promoted by takeovers and by the rise in institutional investors' ownership. In subsequent years, however, societal pressure lead corporations to adopt environmental and social objectives as well. In this context, the 2019 Business Roundtable Statement on the purpose of the corporation does not appear as a dramatic innovation, but more like a codification of the existing practice. Something similar occurred when the BRT embraced shareholder value in 1997.

In spite of the proliferation of corporate goals, we find that executive compensations remain overwhelmingly focused on shareholder value, as measured by stock prices and financial performance. Yet, we do observe an increase in the use of environmental and social metrics in compensation, especially in companies whose CEOs signed the BRT statement. Thus, while not a major philosophical shift, the BRT statement was associated with some change in behavior.

There is no evidence that a focus on shareholder value is detrimental to the long-term health of a corporation, whether that health is measured with profits, growth, survival, or stock market returns. There is only some evidence that focusing on shareholder value might reduce the growth in assets over a five-year horizon. At the same time, there is no evidence that the adoption of a shareholder value objective increased profitability or stock returns. In sum, while not irrelevant, the objectives by which U.S. corporations have been run may have much less influence on what they actually do than the current debate might suggest.

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Figure 1: Number of Annual Reports without A Letter

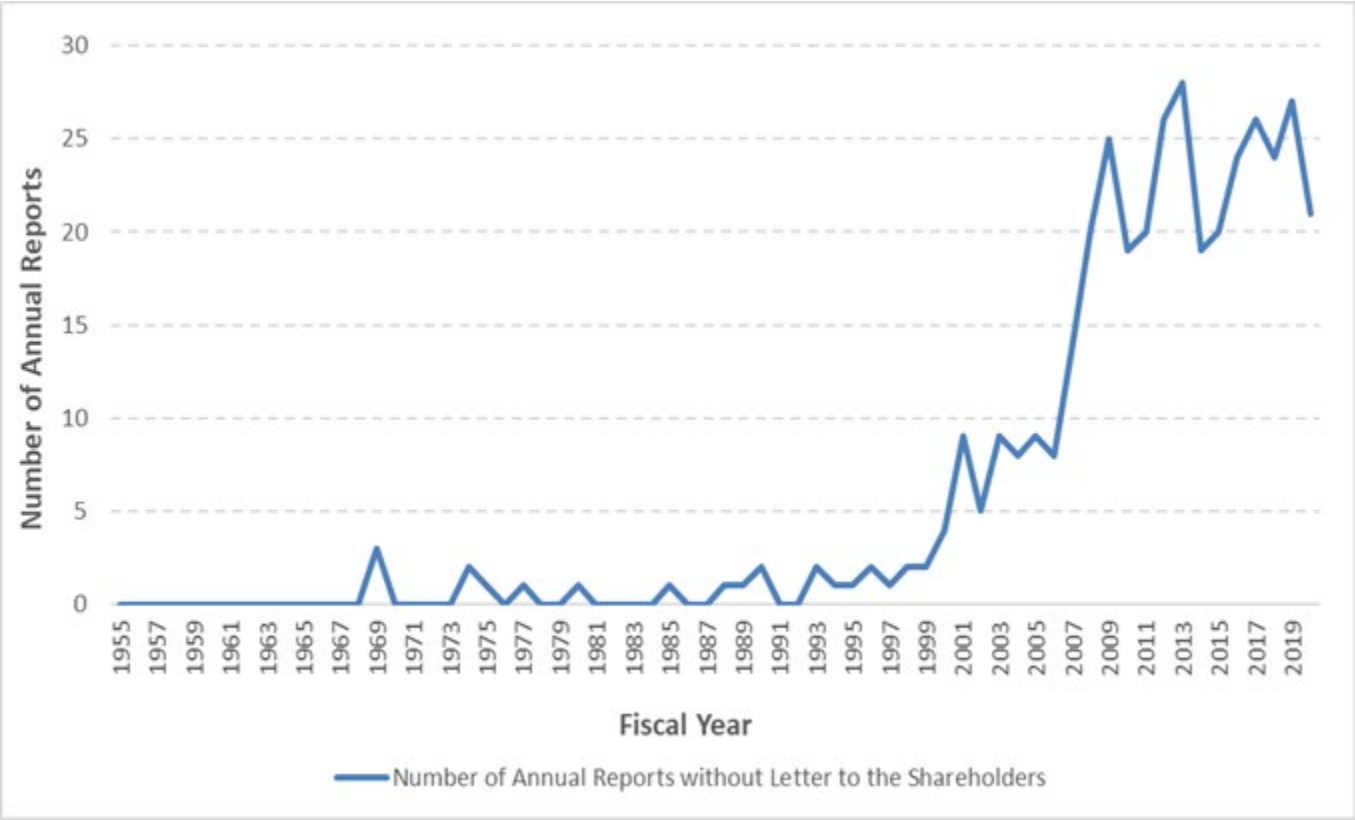


Figure 2: Average length of letters per year, in number of paragraphs.

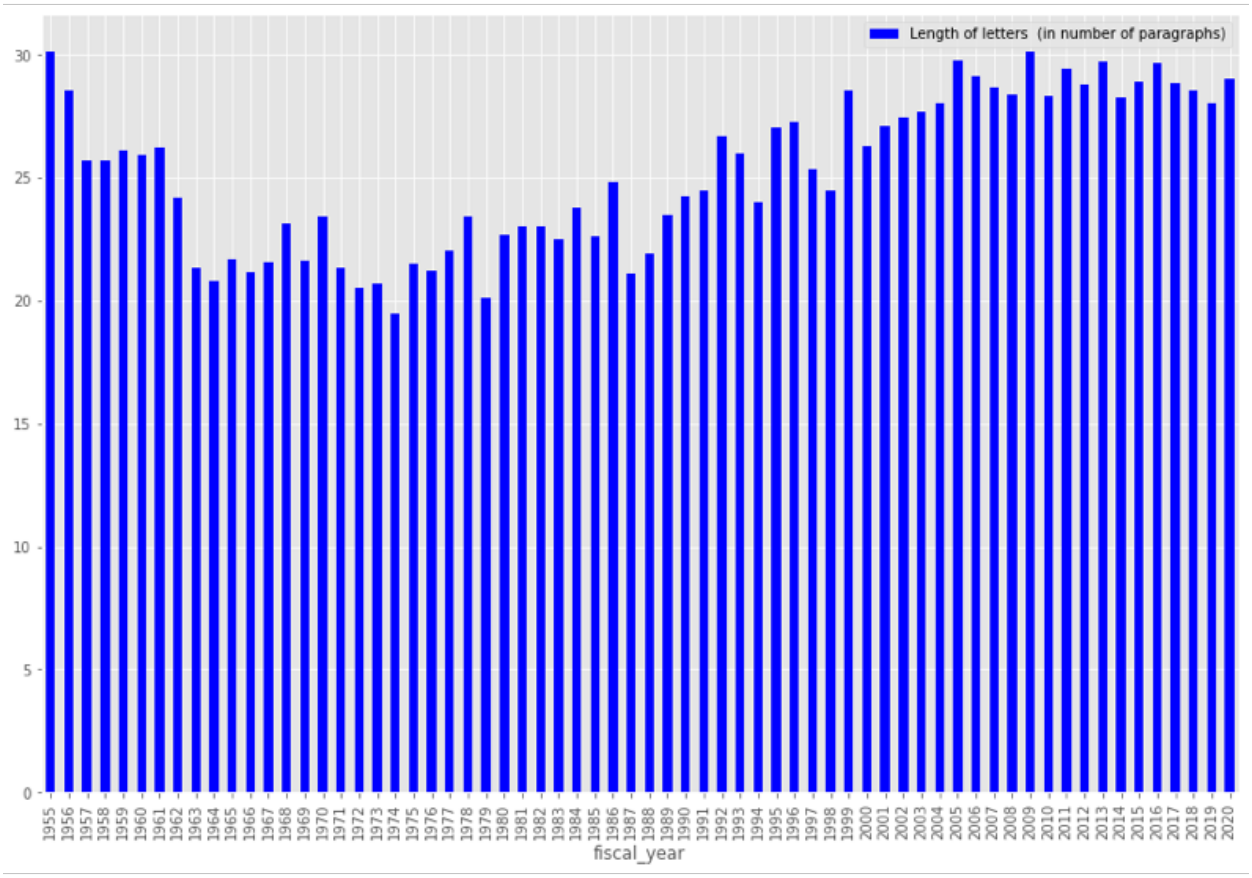


Figure 3a: Confusion Matrix After First Iteration

We train and test on a dataset of 4,500 instances drawn from a pool of paragraphs that contain any of the keywords in the "goal" dictionary. A label of "1" indicates a goal paragraph, and a label of "0" indicates non-goal.

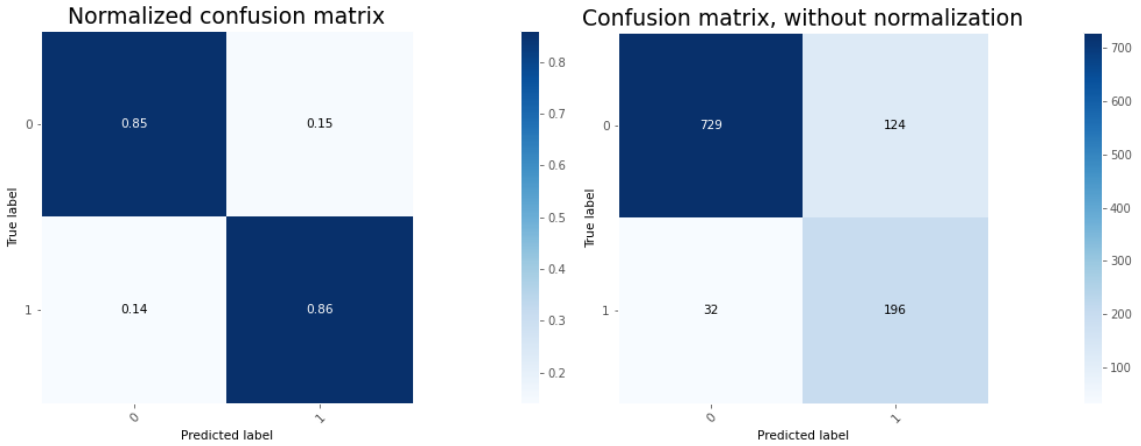


Figure 3b: Confusion Matrix After Second Iteration

We train and test on an extended dataset, containing 1300 additional paragraphs. We sample 100 instances for each corporate objective we are interested in tracking, from the pool of paragraphs contains the relevant trigrams for each objective.

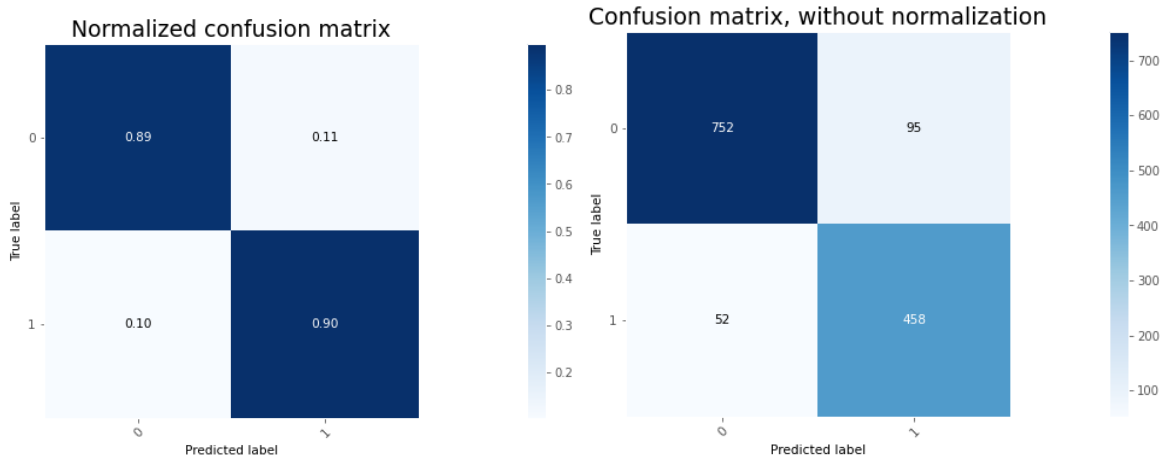


Figure 4a: Percentage of paragraphs that are goals in the labeled dataset.

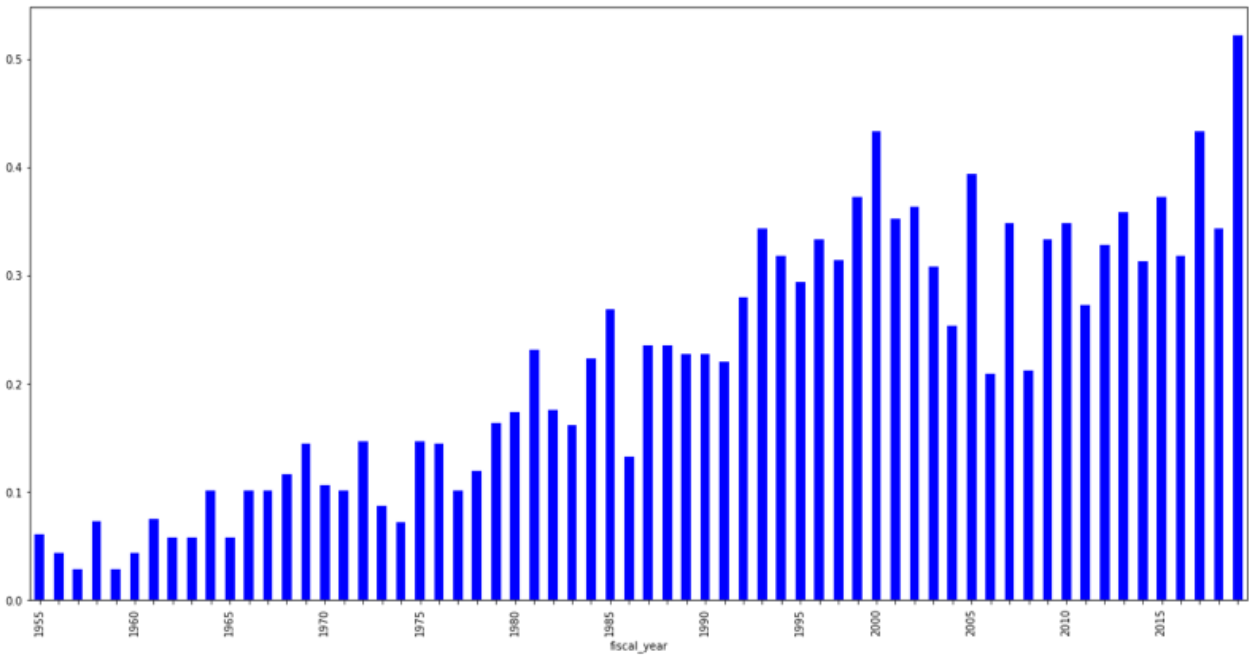


Figure 4b: Proportion of predicted goal-paragraphs and goal-paragraphs of our interest.

The goals are extracted from the shareholders' letters using two text classification algorithms. Blue bar is the percentage of paragraphs in a given year predicted as goals by the binary classifier, red bars is the proportion conditional on at least one of the goals of our interest to be recognized in the subsequent multi-label classification step.

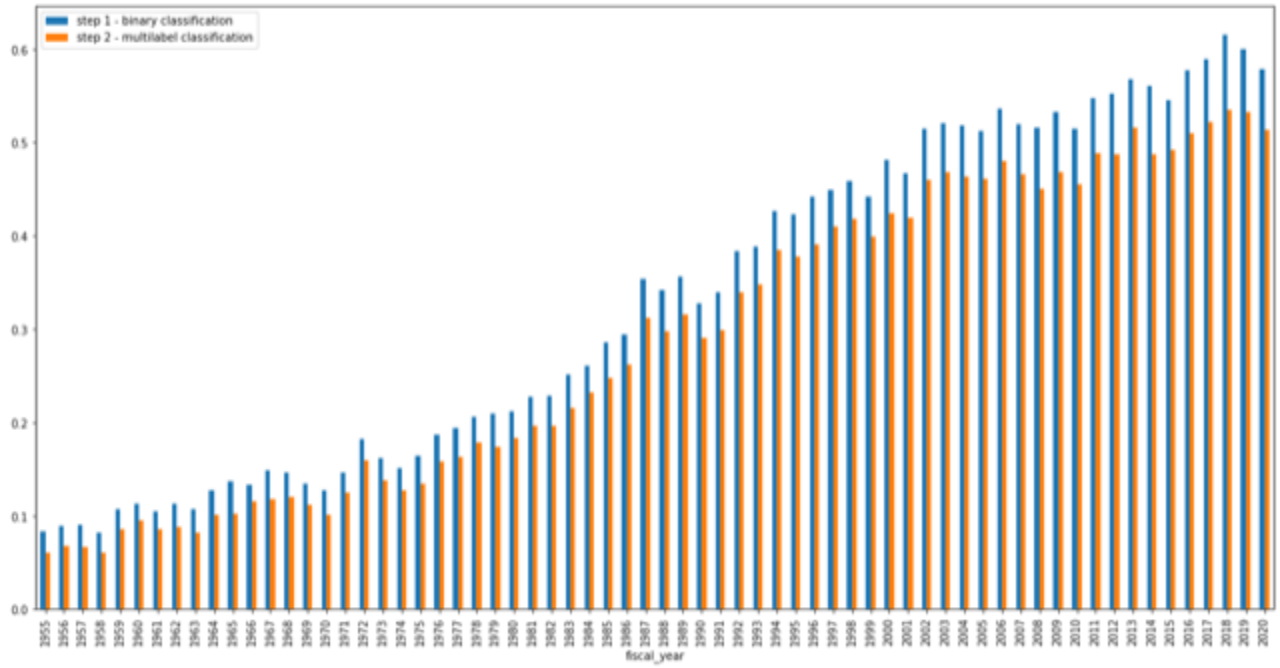


Figure 5a: Share of firms by number of goals predicted.

The figure shows the share of firms espousing zero, one, and multiple goals (among the 13 goals) in their letters to shareholders from 1955 to 2020. The sample includes the largest 120 non-financial firms by sales and the largest 30 financial firms by assets on Fortune 500, subject to availability of shareholder letter.

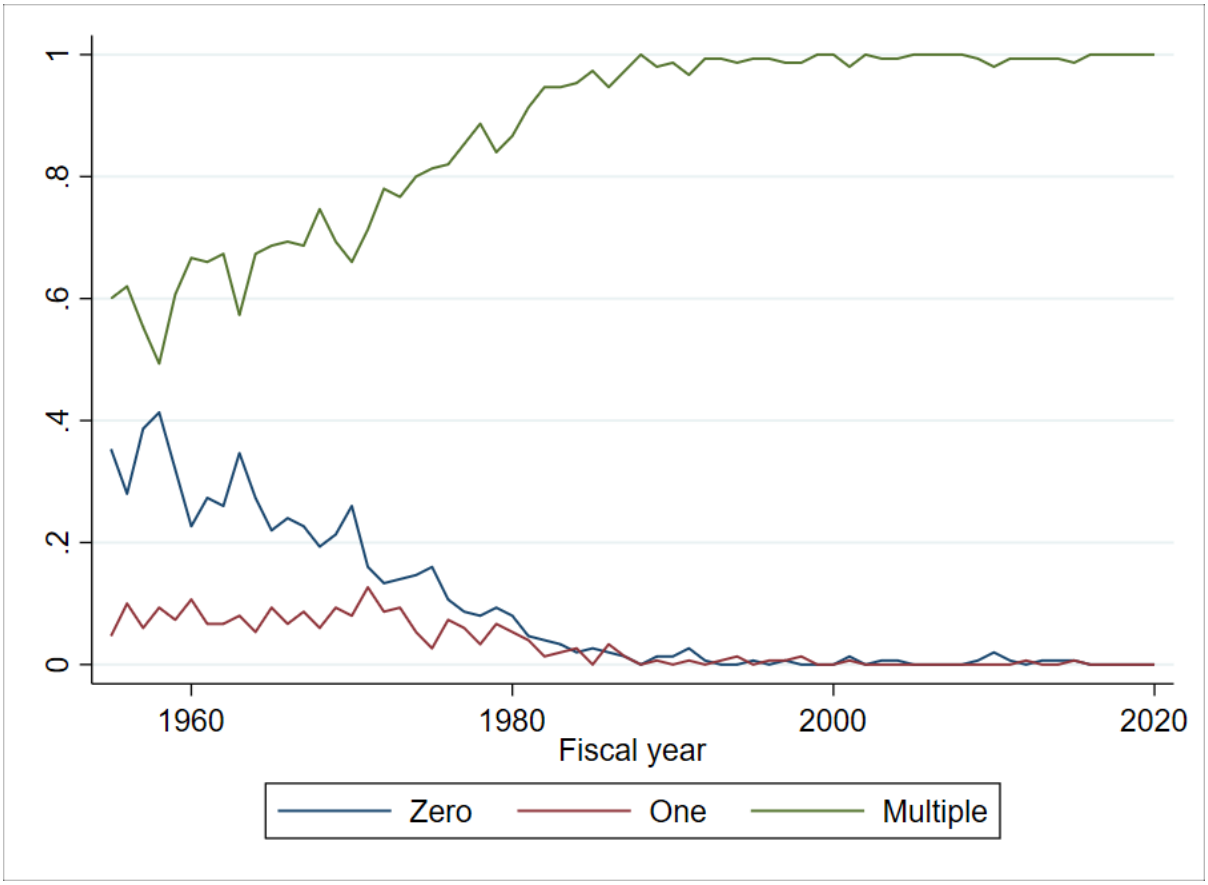


Figure 5b: Average number of different predicted corporate objectives.

The figure shows the average number of goals mentioned in the letters to shareholders from 1955 to 2020, conditional on mentioning at least one goal. A firm espouses shareholder value if it states it in either the broad or the narrow sense, such that there is no double counting. The sample includes the largest 120 non-financial firms by sales and the largest 30 financial firms by assets on Fortune 500, subject to the availability of shareholder letters.

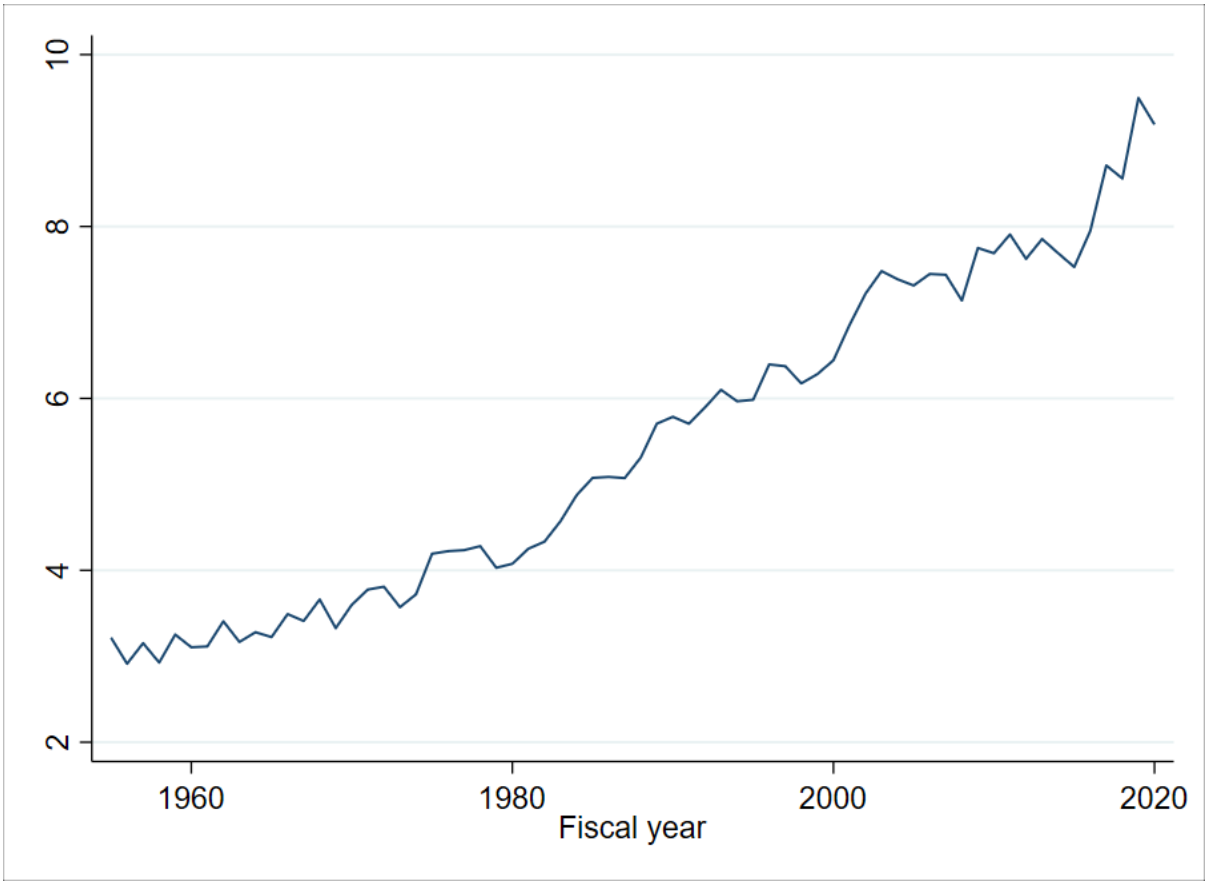


Figure 6a: Percentage of firms listing shareholder value as a goal.

The figure shows the share of firms espousing the goal "shareholder value" from 1955 to 2020, conditional on mentioning at least one goal. The two lines show separately the share of firms espousing shareholder value in the broad and the narrow sense. The sample includes the largest 120 non-financial firms by sales and the largest 30 financial firms by assets on Fortune 500, subject to the availability of the shareholder letter. Broad is the result of multi-class, multi-label classification step, trained on a set of paragraphs discussing profitability, efficiency, return on investments and other topics that can be pooled into the shareholder value objective. Narrow shows the percentage of letters displaying the two-word sequence of words 'shareholder' (or 'stockholder', 'share owner', 'stock owner') and 'value', in any order, in a broad shareholder value paragraph.

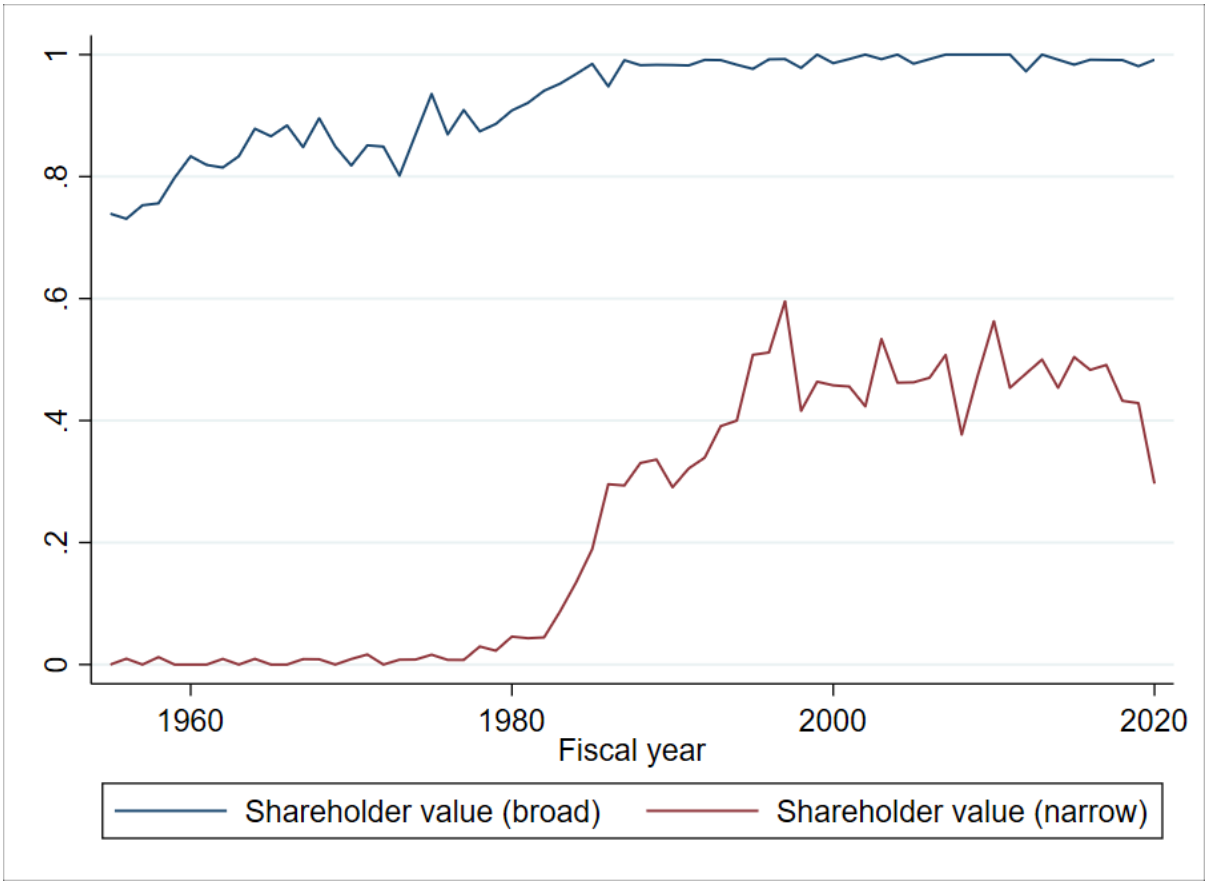


Figure 6b: Share of Letters Espousing Particular Goals

We plot the share of shareholder letters that contain at least one mention of a particular category of goal over time. We segregate the 13 goals of interest into three categories. "Corporate performance" goals include growth, innovation, and risk management. "Other stakeholders" goals include customers, employees, suppliers, community, and stakeholders. Finally, "Society as a whole" goals include philanthropy, ethics, ESG social, and ESG environment.

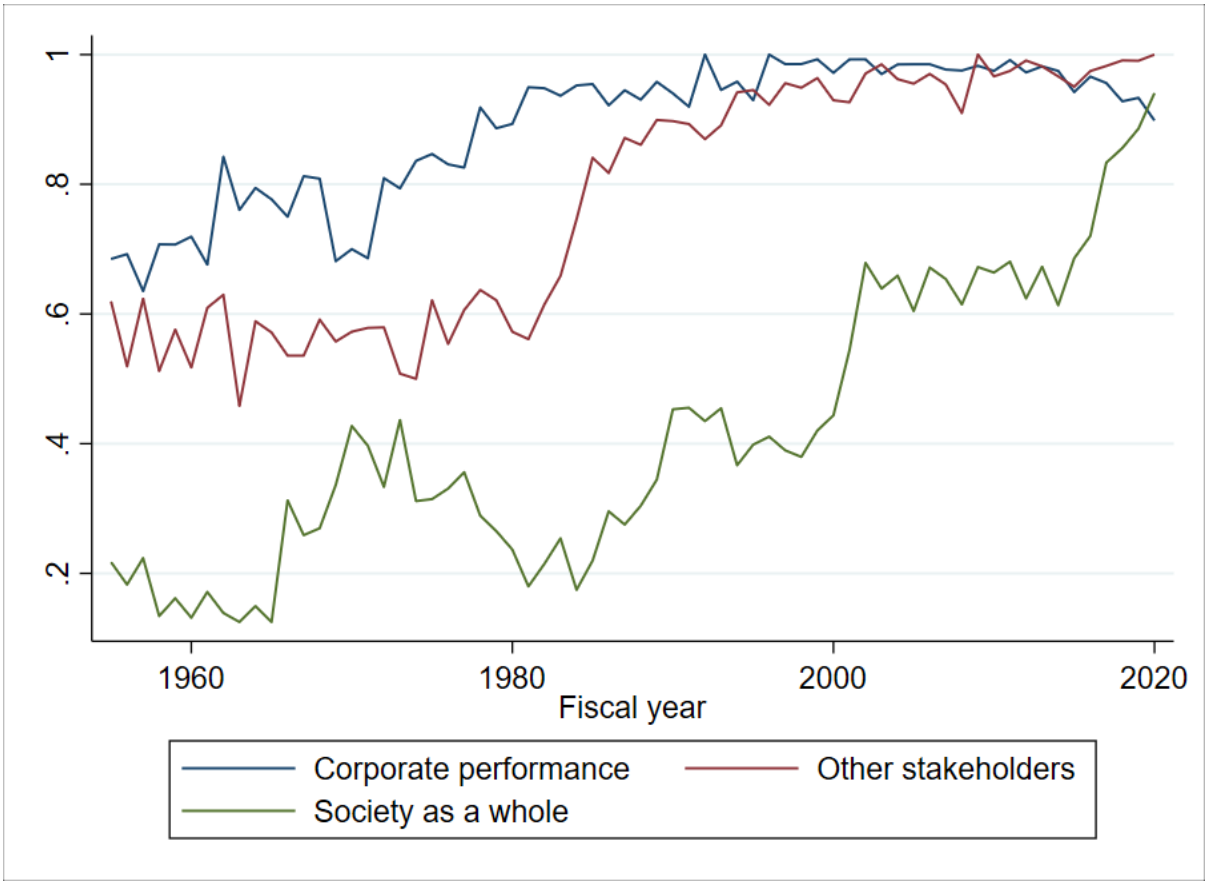


Figure 6c: Relative Frequency of Goals

The figure shows, among the objectives espoused by firms in each year, what fraction belong to the category *corporate performance* (market share growth, innovation, and risk management), *other stakeholders* (customers, employees, suppliers, community, and stakeholders), *society as a whole* (ethics, philanthropy, ESG social, and ESG environment) respectively. The sample includes the largest 120 non-financial firms by sales and the largest 30 financial firms by assets on Fortune 500, subject to availability of shareholder letter. The sample period is 1955 to 2020.

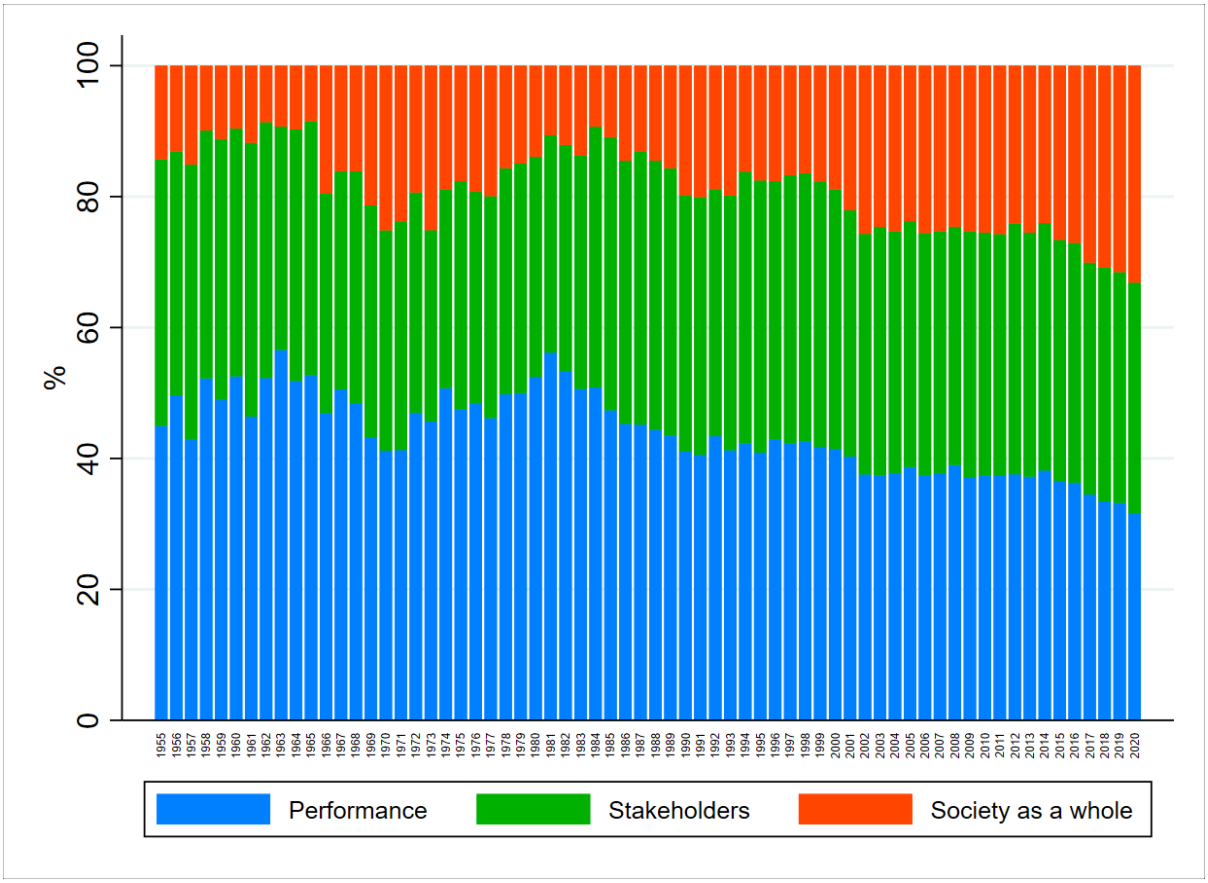


Figure 6d: Relative frequency of the various goals.

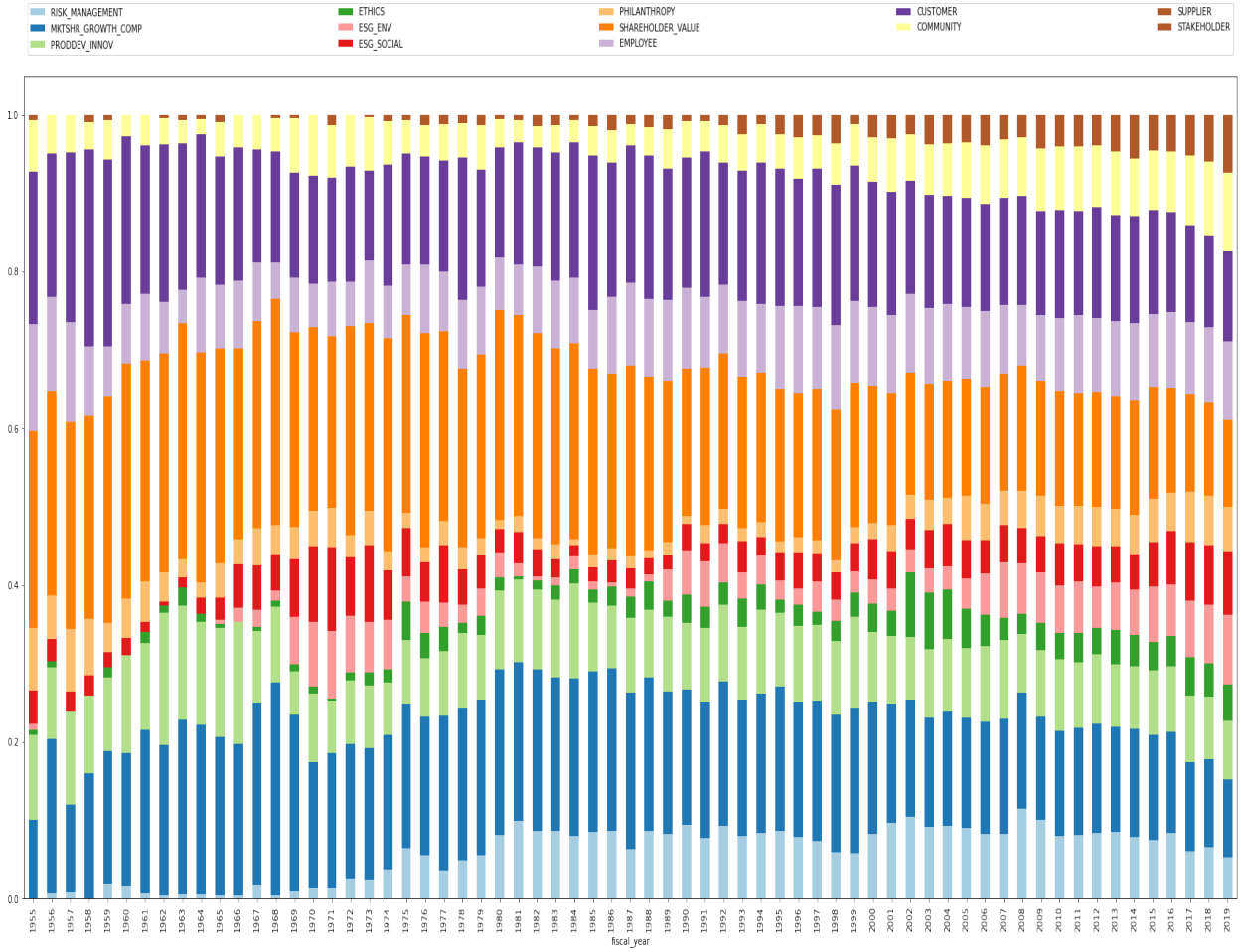


Figure 7: Correlation of Frequency of Corporate Goals with Ngram Frequency in Books

The figure shows the trend of the proportion of firms espousing "Ethics" as an objective in their letter to shareholders juxtaposed with the mention of "Accounting Fraud" (and lower-case variations) as a proportion of all bigrams in published books sourced from Google-Ngrams.

Figure 7a: Ethics and Accounting Fraud

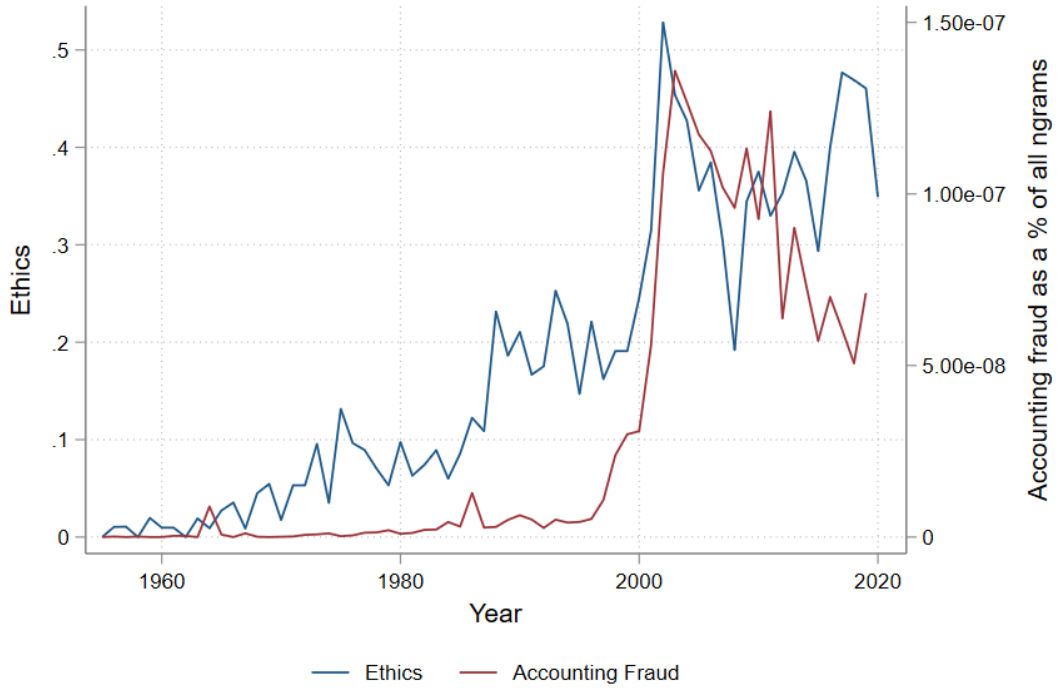


Figure 7b: ESG Environment and Climate Change

The figure shows the trend of the proportion of firms espousing "ESG Environment" as an objective in their letter to shareholders juxtaposed with the mention of "Climate Change" as a proportion of all bigrams in published books sourced from Google-Ngrams.

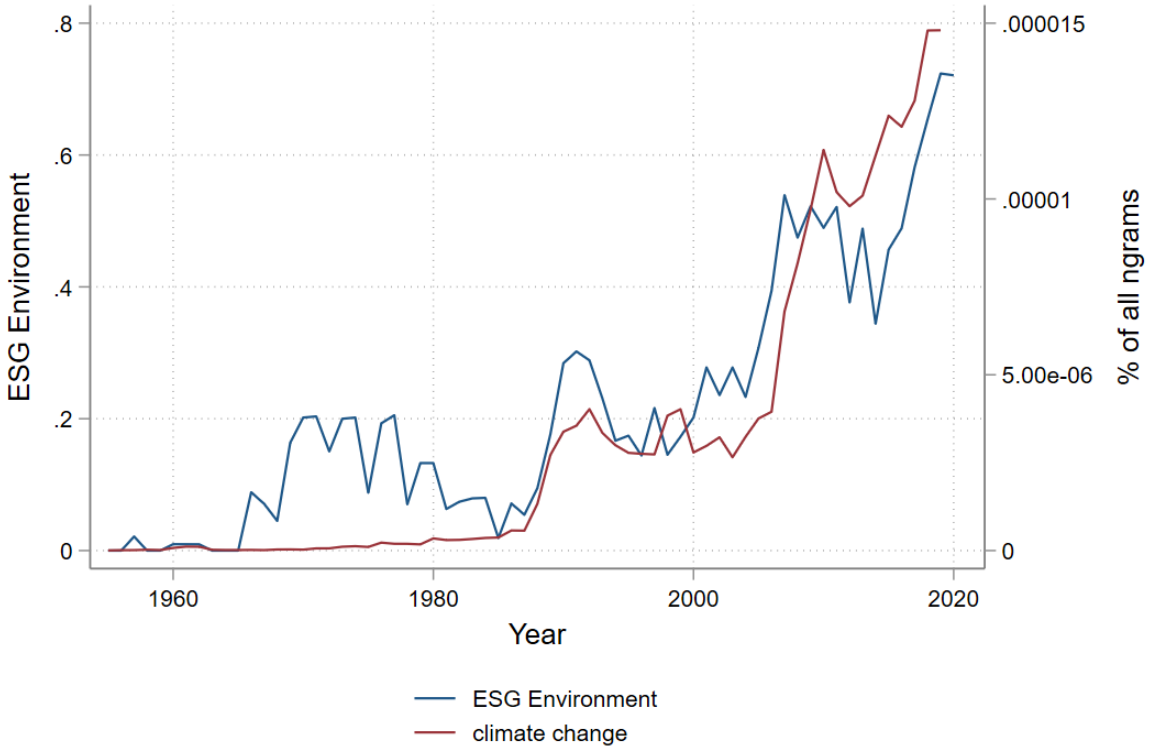


Figure 8: Correlation of Corporate Goals with N-gram Frequency

The figure represents the coefficient plots of regressions with the proportion of firms in our sample espousing an objective y_t in a year regressed against relevant bigrams measured as proportion of all bigrams in published books sourced from Google Books-N-grams. The regression specification used is: $y_t = a + \beta_1 x_{t-1} + \beta_2 x_t + \beta_3 x_{t+1} + \varepsilon_t$, where both the dependent and independent variables are de-trended using the HP filter. Independent variables are standardized. Coefficients $\beta_1, \beta_2 \; and \; \beta_3$ from each regression are represented with 95% confidence interval bands. Marker labels indicate the dependent variable. L.Ngram represents the one-year lagged value, Ngram is contemporaneous and F.Ngram represents one-year lead. Newey-West standard errors are used.

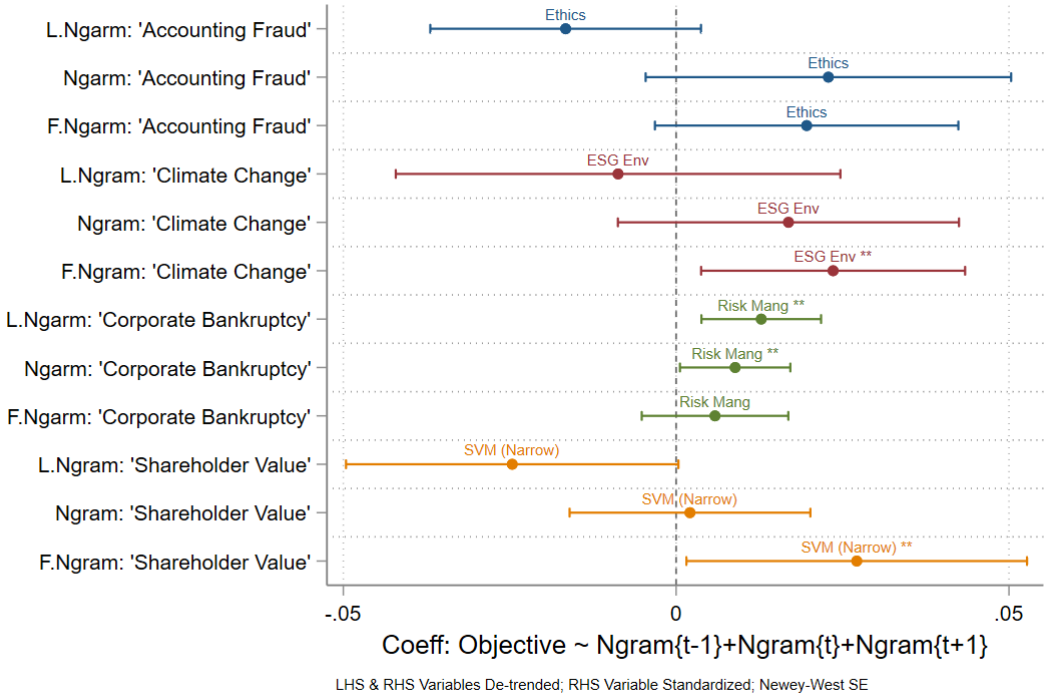


Figure 9: Evolution of Institutional Ownership

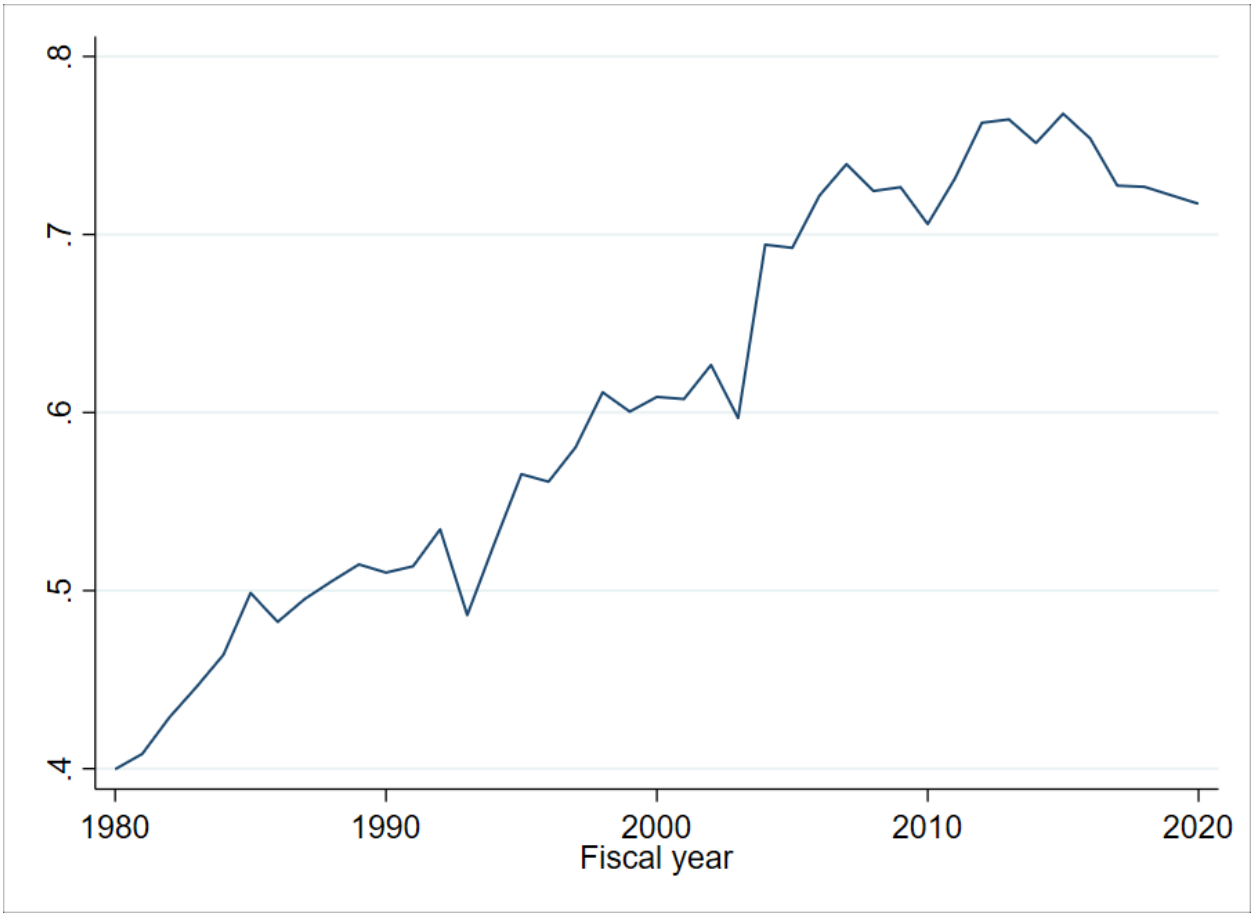


Table 1: Coverage of the sample over time

The sample contains the top 120 non-financial firms, ranked by revenues, and the top 30 financial firms, ranked by assets, in the yearly list of Fortune 500 between 1955-2020. We report the number of shareholder's letters collected for the sample, the percentage coverage, and the share unavailable for the 20 years sub-periods 1955-1974, 1975-1994, 1995-2014, the 6 years sub-period 2015-2020, and for the entire sample. We eliminate companies that do not release annual reports or shareholders' letters from the initial sample to create the potential sample. We also report the number of missing annual reports, reflecting the number of company-year observations for which we could not locate the annual report.

	1955-74	1975-94	1995-2014	2015-2020	1955-2020
Initial sample	3,000	3,000	3,000	900	9,900
Companies that do not release Annual Reports	3	67	26	5	101
Identified a Annual Report but it has no letter	5	11	231	142	389
% Annual Reports with no letter	0%	0%	8%	16%	4%
Potential sample	2,992	2,922	2,743	753	9,410
Identified the Annual Report but unnable to collect Letter	14	120	4	0	138
Annual Report not on Investor Relations website/Mergent/Proquest	0	0	72	35	107
Missing Annual Report	57	199	55	0	311
Final sample	2,921	2,603	2,612	718	8,854
% of potential sample	98%	89%	95%	95%	94%
% of initial sample	97%	87%	87%	80%	89%

Table 2a: Summary Statistics: Corporate Goals

The table shows descriptive statistics of objectives mentioned in the annual letter to shareholders of Fortune firms. The sample is restricted to letters from 1980 to 2020.

	Mean	Median	SD	Min	Max	N
Risk Management	0.622	1	0.485	0	1	4,998
Market Share Growth	0.954	1	0.209	0	1	4,998
Innovation	0.826	1	0.379	0	1	4,998
Ethics	0.263	0	0.440	0	1	4,998
ESG Environment	0.260	0	0.439	0	1	4,998
ESG Social	0.245	0	0.430	0	1	4,998
Philanthropy	0.225	0	0.417	0	1	4,998
Supplier	0.137	0	0.344	0	1	4,998
Employee	0.680	1	0.466	0	1	4,998
Customer	0.879	1	0.327	0	1	4,998
Community	0.377	0	0.485	0	1	4,998
Shareholder Value Broad	0.971	1	0.167	0	1	4,998
Shareholder Value Narrow	0.387	0	0.487	0	1	4,998
Stakeholder	0.113	0	0.316	0	1	4,998

Table 2b: Summary Statistics: Compustat Variables

Summary statistics of Compustat variables of Fortune 150 firms during the 1980-2020 sample period. Book Leverage is the sum of debt in current liabilities and long-term debt divided by assets. 39 negative values of Interest expense to EBITDA ratio are dropped. Tobin's Q is estimated as (Total Assets + Market Equity - Book Equity)/Total Assets. Return on Assets is calculated as Income before Extraordinary Items divided by Firm Assets.

	Mean	Median	SD	Min	Max	N
Assets	34,948	25,994	26,738	509	73,867	4,995
Revenue	34,981	20,299	46,387	1,337	557,000	4,992
Book Leverage	0.263	0.240	0.163	0	1.287	4,986
Interest Expense/EBITDA	0.185	0.121	0.232	0	3.278	4,403
R& D Expense/Assets	0.032	0.019	0.037	0	0.297	2,709
Return on Assets	0.060	0.052	0.078	-1.344	1.102	4,995
Tobin's Q	1.646	1.306	1.051	0.446	24.004	4,051
EBITDA/Assets	0.131	0.131	0.076	-0.208	0.441	4,913

Table 2c: Summary Statistics: Other Variables

Summary statistics of other variables used in the paper. Takeover pressure for a firm is measured as the proportion of firms in the same Fama-French-30 industry classification weighted by firm assets that received a takeover bid in the previous year. Patents and Citation data is sourced from the NBER patent data project over the period 1980-2006. EPA Penalties, Cases, and Violations variables are sourced from the US Environment Protection Agency's Integrated Compliance Information System - Federal Enforcement and Compliance case-wise dataset over the period 1980-2020. Total ESG score is the company-wise ESG scored rated by Sustainalytics with data available for the period 2010-2020. Sustainalytics measures the performance against ESG issues by looking at a comprehensive set of core and sector-specific metrics, which are scored and weighted to determine a company's overall ESG performance. Underlying each industry template is a customized weight matrix that defines the relative importance of each indicator and reflects the emphasis on key ESG issues per industry. Institutional Ownership data of 13F firms is sourced from Thomson-Reuters and is available from 1980 until 2020. Bankruptcy data is from Moody's Default and Recovery Database for 1980-2020. Acquisition data is from Security Data Company's Mergers & Acquisition database for 1980-2020.

	Mean	SD	Min	Median	Max	Count
Takeover Pressure	0.047	0.052	0	0.033	0.579	2,466
Number of patents applied	123	293	0	10	4344	2,648
Number of citations within 5 years	866	2670	0	44	48541	2,648
No. of EPA Penalties	0.025	0.186	0	0	3	4,998
No. of EPA Cases Registered	0.024	0.178	0	0	3	4,998
EPA Penalty	79,429	710,000	-	-	25,000,000	4,998
Total ESG Score	60.595	8.363	39.000	60.333	86.806	1,135
Institutional ownership	0.630	0.182	0	0.643	2.503	3,343
Vanguard	0.029	0.028	0	0.025	0.158	3,343
BlackRock	0.028	0.036	0	0.001	0.193	3,343
State Str	0.034	0.029	0	0.033	0.397	3,343
JP Morgan	0.012	0.014	0	0.008	0.192	3,343
Fidelity	0.027	0.036	0	0.016	0.327	3,343
Other institutions	0.635	0.216	0	0.610	2.556	3,343

Table 2d: Compensations from Proxy Statements

Summary statistics of the executive compensation variables collected from the annual DEF 14A filings for 2008, 2013, 2018, and 2020. The data represents the existence of any kind of Non-Financial Metrics present in a firm's annual proxy filing (i.e., DEF 14 A). We collected data regarding the overall pay mix of the CEOs of all the firms in our sample. We focus on the basic elements of a CEO's Pay, including base salary, annual bonus, and a long-term equity program. The component of our interest, in this case, is the annual bonus. The annual bonus contains almost exclusively different kinds of subjective performance measures. We classify these subjective measures broadly under 3 categories: 1) Social Metrics (including ESG-Environment, ESG-Social, Ethics, Community), 2) Stakeholder-based Metrics (including Supplier, Customer Satisfaction, Employee care, and Stakeholders), 3) Non-Financial-Performance-based (including product development & innovation and Risk Management). The Presence columns show the mean of various metrics. The percentage columns show the average percentage of these metrics in the overall compensation of the CEO.

	Presence (frequency)				% of Total Compensation			
	2008	**2013**	**2018**	**2020**	**2008**	**2013**	**2018**	**2020**
Base Salary	1.00	1.00	0.98	0.99	12.32	11.65	11.05	9.95
Annual Cash Bonus	0.96	0.96	0.95	0.93	20.48	18.61	17.94	17.41
Long-term-Incentive program	0.98	0.99	0.98	0.99	67.19	69.74	70.99	72.64
Bonus based on FM					17.30	15.94	13.67	13.48
Total % Compensation based on FM					84.49	85.68	84.66	86.12
Non-Financial Metrics	0.32	0.30	0.44	0.45	3.18	2.67	4.27	3.93
Compensation Modifier	0.27	0.31	0.07	0.13	14.32	16.80	7.22	27.94
Any kind of NF Metric	0.52	0.59	0.48	0.57				
Both NF metric and Compensation Modifier	0.03	0.02	0.04	0.01				
Social NF Metrics	0.18	0.18	0.21	0.37	0.87	1.11	1.10	0.88
ESG Social	0.17	0.18	0.18	0.37	1.01	1.04	1.31	0.87
ESG Environment	0.04	0.06	0.06	0.08	0.93	1.07	1.31	0.64
Ethics	0.02	0.02	0.01	0.12	0.65	1.09	0.69	1.05
Community	0.00	0.02	0.00	0.04		1.22		0.94
Performance-Based NF Metrics	0.20	0.11	0.27	0.36	0.99	1.20	1.70	1.25
Product Development & Innovation	0.20	0.08	0.25	0.34	0.99	0.83	1.66	0.95
Risk Mangement	0.00	0.02	0.01	0.06		1.58	1.73	1.56
Stakeholder-Based NF Metrics	0.32	0.24	0.38	0.44	1.29	0.98	1.73	0.84
Supplier	0.02	0.02	0.01	0.04	0.63	0.83	1.00	0.92
Customer Satisfaction	0.23	0.10	0.20	0.38	1.39	1.22	1.88	0.96
Employee	0.29	0.20	0.34	0.42	1.05	1.07	1.76	0.85
Stakeholder	0.02	0.03	0.01	0.10	1.74	0.81	1.61	0.64

Table 3: Product Innovation vs. R&D Intensity

The sample includes the largest 120 non-financial Fortune 500 firms by sales from 1955 to 2020 that provided a letter to shareholders and can be identified in Compustat in the corresponding year. INNOV indicates whether a firm espouses product innovation and development each year. R&D Expense/Asset is calculated from Compustat, then winsorized at 1% for outliers. Log(Patent) is the log number of patents filed by a firm each year. Log(Citation) is the log of the total number of citations received by a firm's patents within 5 years since they were filed. Both are calculated using the NBER patent data project (PDP) data. We add one to the number of patents and citations such that firms with no patterns are not dropped when taking the log. Since PDP covers only the period between 1976 and 2006, the corresponding regressions are restricted to this time frame. All regressions include industry fixed effects (Fama-French 30) and year fixed effects. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Robust standard errors are in brackets.

	(1)	(2)	(3)	(4)	(5)	(6)
	INNOV	**INNOV**	**INNOV**	**INNOV**	**INNOV**	**INNOV**
R&D Expense/Assets	1.253***			0.538**		
	(0.176)			(0.262)		
Log(Patent)		0.019***			0.006	
		(0.003)			(0.004)	
Log(Citation)			0.015***			0.005
			(0.003)			(0.003)
Constant	0.648***	0.600***	0.597***	0.661***	0.625***	0.625***
	(0.006)	(0.010)	(0.010)	(0.007)	(0.011)	(0.012)
Year FE	Y	Y	Y	Y	Y	Y
Industry FE	N	N	N	Y	Y	Y
R-squared	0.250	0.220	0.220	0.277	0.241	0.241
Observations	6,747	4,508	4,508	6,747	4,508	4,508

Table 4a: Goals and Performance: Shareholder Value vs. Tobin's Q and EBITDA/Assets

The sample includes the largest 120 non-financial Fortune 500 firms by sales from 1955 to 2020 that provided a letter to shareholders and can be identified in Compustat in the corresponding year. SVM (Narrow) indicates whether a firm espouses shareholder value maximization in the narrow sense. Tobin's Q and EBITDA/Assets are calculated from Compustat, then winsorized at 1% for outliers. Inclusion of year and industry (Fama-French 30) fixed effects are indicated underneath. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Robust standard errors are in brackets.

	(1) SVM (Narrow)	(2) SVM (Narrow)	(3) SVM (Narrow)	(4) SVM (Narrow)
Tobin's Q	-0.042***		-0.0387***	
	(0.006)		(0.006)	
EBITDA/Assets		-0.210***		-0.200***
		(0.066)		(0.071)
Constant	0.326***	0.266***	0.320***	0.265***
	(0.011)	(0.012)	(0.011)	(0.012)
Year FE	Y	Y	Y	Y
Industry FE	N	N	Y	Y
R-squared	0.251	0.265	0.262	0.277
Observations	5,441	6,706	5,441	6,706

Table 4b: Goals and Performance: Risk Management and Leverage

The sample includes the largest 120 non-financial Fortune 500 firms by sales from 1955 to 2020 that provided a letter to shareholders and can be identified in Compustat in the corresponding year. RM is an indicator of whether a firm espouses risk management in its shareholder letter each fiscal year. Book leverage and Interest Expense/EBITDA (i.e., inverse interest coverage) are calculated from Compustat, then winsorized at 1% for outliers. All regressions include industry fixed effects (Fama-French 30) and year fixed effects. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Robust standard errors are in brackets.

	(1)	(2)	(3)	(4)
	RM	**RM**	**RM**	**RM**
Book Leverage	0.192***		0.215***	
	(0.039)		(0.041)	
Interest Expense/EBITDA		0.092***		0.080***
		(0.029)		(0.029)
Constant	0.359***	0.394***	0.353***	0.396***
	(0.011)	(0.007)	(0.011)	(0.007)
Year FE	Y	Y	Y	Y
Industry FE	N	N	Y	Y
R-squared	0.263	0.263	0.284	0.283
Observations	6,683	6,641	6,683	6,641

Table 4c: Goals and Performance: ESG Environment and EPA Fines

The table presents the regressions of Companies espousing ESG Environment in their shareholder letters when they faced EPA enforcement actions in the previous year. The data comes from the US Environmental Protection Agency's Integrated Compliance Enforcement System-Federal Enforcement and Compliance case-wise database. The sample ranges from 1974-to 2020. EPA Penalty is the US Dollar amount of federal, state, and local penalties charged to the firm. The number of EPA penalties reflects the number of case settlements that result in a penalty. The number of cases registered represents the cases lodged against the corporation in a given year with the EPA. All specifications have industry and year fixed effects. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Robust standard errors are in brackets.

	(1) ESG Environment	(2) ESG Environment	(3) ESG Environment
$\text{Log(EPA Penalty)}_{t-1}$	0.009***		
	(0.003)		
$\text{No. of EPA Penalties}_{t-1}$		0.086**	
		(0.036)	
$\text{No. of Cases Registered}_{t-1}$			0.069*
			(0.038)
Constant	0.270***	0.271***	0.271***
	(0.006)	(0.006)	(0.006)
Industry and Year FE	Y	Y	Y
R-squared	0.270	0.269	0.269
Observations	4,123	4,123	4,123

Table 5a: Shareholder Value (Narrow) vs. Ownership

The sample includes the largest 120 non-financial Fortune 500 firms by sales that provide a letter to shareholders and can be identified in Compustat in the corresponding year. SVM (Narrow) indicates whether a firm espouses shareholder value maximization in the narrow sense. Institution ownership is the fraction of outstanding shares owned by 13F institutions; data is from Thomson Reuters and available between 1980 and 2020. The regression sample is restricted to the years in which the relevant data are available. Inclusion of year and industry (Fama-French 30) fixed effects are indicated underneath. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Robust standard errors are in brackets.

	(1) SVM (Narrow) Full Period	(2) SVM (Narrow) Full Period	(3) SVM (Narrow) 1980 to 2000	(4) SVM (Narrow) 2000 to 2020	(5) SVM (Narrow) 1980 to 2000	(6) SVM (Narrow) 2000 to 2020	(7) SVM (Narrow) 5-year Diff.
Institutional Ownership	0.288***	0.345***	0.195*	0.318***	0.236**	0.365***	0.412**
	(0.059)	(0.061)	(0.100)	(0.072)	(0.120)	(0.072)	(0.176)
Constant	0.225***	0.190***	0.218***	0.244***	0.197***	0.212***	
	(0.038)	(0.039)	(0.052)	(0.051)	(0.062)	(0.052)	
Year FE	Y	Y	Y	Y	Y	Y	Y
Industry FE	N	Y	N	N	Y	Y	N
R-squared	0.091	0.122	0.140	0.029	0.169	0.100	0.004
Observations	2,658	2,658	1,086	1,641	1,086	1,641	1,653

Table 5b: Shareholder Value (Narrow) vs. Takeover Pressure

The sample includes the largest 120 non-financial Fortune 500 firms by sales that provide a letter to shareholders and can be identified in Compustat in the corresponding year. SVM (Narrow) indicates whether a firm espouses shareholder value maximization in the narrow sense. Takeover pressure of a firm is calculated as the fraction of the firms' assets in the same FF30 industry that received at least one takeover bid; data is available 1962-2001. The regression sample is restricted to the years in which the relevant data are available. Inclusion of year and industry (Fama-French 30) fixed effects are indicated underneath. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Robust standard errors are in brackets.

	(1) SVM (Narrow) Full Period	(2) SVM (Narrow) Full Period	(3) SVM (Narrow) 1980 to 2000	(4) SVM (Narrow) 1980 to 2000	(5) SVM (Narrow) 5-year Diff.
Takeover Pressure	0.127***	0.137***	0.562***	0.620***	0.108**
	(0.041)	(0.045)	(0.178)	(0.184)	(0.048)
Constant	0.150***	0.149***	0.279***	0.276***	
	(0.005)	(0.005)	(0.012)	(0.013)	
Year FE	Y	Y	Y	Y	Y
Industry FE	N	Y	N	Y	N
R-squared	0.279	0.285	0.135	0.151	0.001
Observations	4,171	4,171	2,044	2,044	2,840

Table 5c: Shareholder Value (Narrow) vs. Ownership and Takeover Pressure

The sample includes the largest 120 non-financial Fortune 500 firms by sales that provide a letter to shareholders and can be identified in Compustat in the corresponding year. SVM (Narrow) indicates whether a firm espouses shareholder value maximization in the narrow sense. Institution ownership is the fraction of outstanding shares owned by 13F institutions; data is from Thomson Reuters and available between 1980 and 2020. Takeover pressure of a firm is calculated as the fraction of the firms' assets in the same FF30 industry that receives at least one takeover bid; data is available 1962-2001. The regression sample is restricted to the years in which the relevant data are available. Inclusion of year and industry (Fama-French 30) fixed effects are indicated underneath. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Robust standard errors are in brackets.

	(1) SVM (Narrow) Full Period	(2) SVM (Narrow) Full Period	(3) SVM (Narrow) 1980 to 2000	(4) SVM (Narrow) 1980 to 2000	(5) SVM (Narrow) 5-year Diff.
Institutional Ownership	0.221**	0.264**	0.219**	0.262**	0.059
	(0.102)	(0.125)	(0.102)	(0.125)	(0.317)
Takeover Pressure	0.648***	0.728***	0.648***	0.728***	0.719**
	(0.248)	(0.251)	(0.248)	(0.251)	(0.355)
Constant	0.164***	0.138**	0.162***	0.137**	
	(0.054)	(0.065)	(0.054)	(0.065)	
Year FE	Y	Y	Y	Y	Y
Industry FE	N	Y	N	Y	N
R-squared	0.147	0.182	0.146	0.182	0.007
Observations	1024	1024	1017	1017	535

Table 6a: Other Goals vs. Ownership: Level Regressions

The sample includes the largest 120 non-financial Fortune 500 firms by sales and the largest 30 financial firms by assets from 1980 to 2020 that provided a letter to shareholders and can be identified in Compustat in the corresponding year. The dependent variables are indicators of whether each firm espouses the corresponding objective each year. The independent variable is the fraction of outstanding shares owned by a 13F institution; data is from Thomson Reuters. Inclusion of year and industry (Fama-French 30) fixed effects are indicated underneath. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Robust standard errors are in brackets.

	(1) Risk Mgt	(2) Mkt Shr Growth	(3) Innovation	(4) Ethics	(5) ESG Envir	(6) ESG Social
Institutional ownership	0.102*	0.018	0.050	-0.080	-0.242***	0.005
	(0.062)	(0.023)	(0.052)	(0.055)	(0.053)	(0.053)
Year FE	Y	Y	Y	Y	Y	Y
Industry FE	Y	Y	Y	Y	Y	Y
R-squared	0.115	0.036	0.102	0.128	0.311	0.180
Observations	3,343	3,343	3,343	3,343	3,343	3,343

	(7) Philanthropy	(8) Supplier	(9) Employee	(10) Customer	(11) Community	(12) Stakeholder
Institutional ownership	-0.026	-0.011	-0.110**	-0.020	-0.097*	0.016
	(0.049)	(0.045)	(0.050)	(0.031)	(0.056)	(0.042)
Year FE	Y	Y	Y	Y	Y	Y
Industry FE	Y	Y	Y	Y	Y	Y
R-squared	0.211	0.083	0.184	0.194	0.201	0.182
Observations	3,343	3,343	3,343	3,343	3,343	3,343

Table 6b: Other Goals vs. Ownership: 5-year Differences

The sample includes the largest 120 non-financial Fortune 500 firms by sales and the largest 30 financial firms by assets from 1980 to 2020 that provided a letter to shareholders and can be identified in Compustat in the corresponding year. The dependent variables are indicators of whether each firm espouses the corresponding objective each year. The independent variable is the fraction of outstanding shares owned by a 13F institution; data is from Thomson Reuters. Inclusion of year and industry (Fama-French 30) fixed effects are indicated underneath. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Newey-West standard errors are in brackets.

	(1) Risk Mgt	(2) Mkt Shr Growth	(3) Innovation	(4) Ethics	(5) ESG Envir	(6) ESG Social
Institutional ownership	0.021	0.060	-0.052	0.039	0.049	-0.128
	(0.153)	(0.048)	(0.112)	(0.160)	(0.149)	(0.151)
Year FE	Y	Y	Y	Y	Y	Y
Industry FE	N	N	N	N	N	N
R-squared	0.000	0.001	0.000	0.000	0.000	0.001
Observations	2,029	2029	2029	2029	2029	2029

	(7) Philanthropy	(8) Supplier	(9) Employee	(10) Customer	(11) Community	(12) Stakeholder
Institutional ownership	-0.155	0.098	-0.168	-0.065	-0.119	0.038
	(0.124)	(0.114)	(0.125)	(0.077)	(0.133)	(0.090)
Year FE	Y	Y	Y	Y	Y	Y
Industry FE	N	N	N	N	N	N
R-squared	0.001	0.000	0.001	0.000	0.000	0.000
Observation	2,029	2029	2029	2029	2029	2029

Table 7a: Identity of Institutional Investors and Objectives: In Level

The sample includes the largest 120 non-financial Fortune 500 firms by sales and the largest 30 financial firms by assets from 1980 to 2020 that provided a letter to shareholders and can be identified in Compustat in the corresponding year. The dependent variables are indicators of whether each firm espouses the corresponding objective each year. The independent variables are the fraction outstanding shares owned by the 5 major 13F institutions (Vanguard, BlackRock, State Street, Fidelity, JP Morgan); data is from Thomson Reuters. We control for ownership by all other institutions combined. Inclusion of year and industry (Fama-French 30) fixed effects are indicated underneath. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Robust standard errors are in brackets.

	(1) Risk Mgt	(2) Mkt Shr Growth	(3) Innovation	(4) Ethics	(5) ESG Envir	(6) ESG Social	(7) Philanthropy
Vanguard	1.045	1.554***	2.388***	0.827	0.355	0.517	-1.462
	(1.085)	(0.422)	(0.905)	(1.044)	(1.004)	(1.051)	(1.011)
BlackRock	-0.941	-0.972**	-1.303**	-1.313*	-0.640	0.360	1.913***
	(0.736)	(0.381)	(0.570)	(0.748)	(0.738)	(0.763)	(0.723)
State Street	0.924***	-0.017	0.392**	1.082***	-0.526*	0.223	0.518*
	(0.329)	(0.095)	(0.198)	(0.351)	(0.288)	(0.328)	(0.289)
Fidelity	-0.382	-0.062	-0.065	-0.485**	-0.502**	0.134	-0.108
	(0.270)	(0.076)	(0.165)	(0.240)	(0.209)	(0.234)	(0.229)
JP Morgan	-1.293**	-0.021	-0.412	0.640	0.932	0.391	-0.206
	(0.649)	(0.252)	(0.469)	(0.579)	(0.593)	(0.593)	(0.493)
Other institutions	0.004	0.006	0.016	-0.105***	-0.101***	-0.074**	-0.056
	(0.045)	(0.017)	(0.037)	(0.037)	(0.034)	(0.037)	(0.035)
Year FE	Y	Y	Y	Y	Y	Y	Y
Industry FE	Y	Y	Y	Y	Y	Y	Y
R-squared	0.117	0.041	0.107	0.133	0.311	0.180	0.214
Observations	3,391	3,391	3,391	3,391	3,391	3,391	3,391

	(8) Supplier	(9) Employee	(10) Customer	(11) Community	(12) Stakeholder	(13) SVM (broad)	(14) SVM (narrow)
Vanguard	-0.429	-1.551*	-0.530	-2.515**	1.896**	0.063	0.956
	(0.902)	(0.820)	(0.432)	(1.044)	(0.922)	(0.189)	(1.095)
BlackRock	-0.216	0.919	0.161	1.825**	-0.654	-0.176	1.045
	(0.590)	(0.571)	(0.358)	(0.742)	(0.621)	(0.181)	(0.784)
State Street	0.682***	1.208***	0.603***	0.455	-0.346	0.096	1.256***
	(0.262)	(0.284)	(0.164)	(0.344)	(0.212)	(0.067)	(0.350)
Fidelity	0.059	-0.085	-0.037	0.044	0.162	-0.031	-0.272
	(0.209)	(0.246)	(0.127)	(0.284)	(0.195)	(0.052)	(0.285)
JP Morgan	0.246	-0.098	-0.489	0.334	0.034	-0.131	-0.550
	(0.518)	(0.550)	(0.417)	(0.647)	(0.430)	(0.219)	(0.621)
Other institutions	-0.057*	-0.103**	0.001	-0.072	-0.036	0.006	0.034
	(0.032)	(0.041)	(0.029)	(0.045)	(0.026)	(0.015)	(0.045)
Year FE	Y	Y	Y	Y	Y	Y	Y
Industry FE	Y	Y	Y	Y	Y	Y	Y
R-squared	0.084	0.189	0.196	0.202	0.185	0.076	0.115
Observations	3,391	3,391	3,391	3,391	3,391	3,391	3,391

Table 7b: Identity of Institutional Investors and Objectives: 5-year Differences

The sample includes the largest 120 non-financial Fortune 500 firms by sales and the largest 30 financial firms by assets from 1980 to 2020 that provided a letter to shareholders and can be identified in Compustat in the corresponding year. The dependent variables are indicators of whether each firm espouses the corresponding objective each year. The independent variables are the fraction outstanding shares owned by the 5 major 13F institutions (Vanguard, BlackRock, State Street, Fidelity, JP Morgan); data is from Thomson Reuters. All variables are calculated as 5-year differences. We control for ownership by all other institutions combined. Inclusion of year and industry (Fama-French 30) fixed effects are indicated underneath. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Newey-West standard errors are in brackets.

	(1) Risk Mgt	(2) Mkt Shr Growth	(3) Innovation	(4) Ethics	(5) ESG Envir	(6) ESG Social	(7) Philanthropy
Vanguard	1.631	0.285	0.833	-1.346	-1.633	-1.178	-2.030
	(2.204)	(0.451)	(1.595)	(2.419)	(2.377)	(2.220)	(1.962)
BlackRock	1.124	-0.562*	0.454	-0.067	0.620	1.996*	1.352
	(1.045)	(0.319)	(0.815)	(1.281)	(1.168)	(1.199)	(1.243)
State Street	0.359	0.042	0.585	-0.710	-0.233	-0.953*	-0.218
	(0.578)	(0.141)	(0.368)	(0.667)	(0.472)	(0.522)	(0.460)
Fidelity	-0.333	-0.054	0.134	-0.155	-0.007	0.522	0.299
	(0.435)	(0.084)	(0.264)	(0.421)	(0.344)	(0.356)	(0.354)
JP Morgan	-2.282**	0.534	0.244	0.720	1.230	0.067	-0.914
	(0.986)	(0.409)	(0.739)	(0.917)	(0.782)	(0.969)	(0.880)
Other institutions	-0.034	0.012	-0.048	-0.177**	0.006	-0.198**	-0.128**
	(0.093)	(0.031)	(0.065)	(0.089)	(0.076)	(0.085)	(0.063)
Year FE	Y	Y	Y	Y	Y	Y	Y
Industry FE	N	N	N	N	N	N	N
R-squared	0.005	0.002	0.002	0.004	0.002	0.008	0.004
Observations	2,029	2,029	2,029	2,029	2,029	2,029	2,029

	(8) Supplier	(9) Employee	(10) Customer	(11) Community	(12) Stakeholder	(13) SVM (broad)	(14) SVM (narrow)
Vanguard	-0.973	-3.477*	-0.589	-3.478	1.108	0.117	0.285
	(1.996)	(1.951)	(0.749)	(2.550)	(1.971)	(0.169)	(2.491)
BlackRock	2.606**	1.588*	0.494	2.037	-0.907	0.106	-0.343
	(1.066)	(0.908)	(0.579)	(1.262)	(1.015)	(0.151)	(1.383)
State Street	0.190	0.823	0.503*	-0.508	-0.600	0.142	0.402
	(0.585)	(0.593)	(0.297)	(0.721)	(0.413)	(0.107)	(0.606)
Fidelity	0.254	0.158	0.242	-0.002	0.038	0.023	-0.219
	(0.325)	(0.359)	(0.175)	(0.438)	(0.365)	(0.064)	(0.444)
JP Morgan	-0.409	-0.141	0.118	-0.427	0.174	0.303	-0.449
	(0.711)	(0.866)	(0.586)	(1.010)	(0.682)	(0.246)	(0.991)
Other institutions	-0.107	-0.159*	-0.069	-0.101	0.008	-0.031	0.144
	(0.073)	(0.085)	(0.058)	(0.082)	(0.048)	(0.023)	(0.101)
Year FE	Y	Y	Y	Y	Y	Y	Y
Industry FE	N	N	N	N	N	N	N
R-squared	0.006	0.005	0.003	0.004	0.002	0.002	0.002
Observations	2,029	2,029	2,029	2,029	2,029	2,029	2,029

Table 8a: Other Goals vs. Takeover Pressure: Level Regressions

The sample includes the largest 120 non-financial Fortune 500 firms by sales and the largest 30 financial firms by assets from 1980 to 2020 that provided a letter to shareholders and can be identified in Compustat in the corresponding year. The dependent variables are indicators of whether each firm espouses the corresponding objective each year. The independent variable is the fraction of the firms' assets in the same FF30 industry that receives at least one takeover bid; data is available 1962-2001. Inclusion of year and industry (Fama-French 30) fixed effects are indicated underneath. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Robust standard errors are in brackets.

	(1) Risk Mgt	(2) Mkt Shr Growth	(3) Innovation	(4) Ethics	(5) ESG Envir	(6) ESG Social
Takeover Pressure	0.127	-0.102	0.044	-0.012	0.070	-0.022
	(0.077)	(0.089)	(0.086)	(0.051)	(0.060)	(0.061)
Year FE	Y	Y	Y	Y	Y	Y
Industry FE	Y	Y	Y	Y	Y	Y
R-squared	0.226	0.183	0.251	0.072	0.124	0.049
Observation	5,004	5,004	5,004	5,004	5,004	5,004

	(7) Philanthropy	(8) Supplier	(9) Employee	(10) Customer	(11) Community	(12) Stakeholder
Takeover Pressure	-0.005	0.002	0.008	-0.154*	-0.029	0.008
	(0.037)	(0.045)	(0.084)	(0.088)	(0.060)	(0.011)
Year FE	Y	Y	Y	Y	Y	Y
Industry FE	Y	Y	Y	Y	Y	Y
R-squared	0.056	0.058	0.211	0.240	0.062	0.043
Observation	5,004	5,004	5,004	5,004	5,004	5,004

Table 8b: Other Goals vs. Takeover Pressure: 5-year Differences

The sample includes the largest 120 non-financial Fortune 500 firms by sales and the largest 30 financial firms by assets from 1980 to 2020 that provided a letter to shareholders and can be identified in Compustat in the corresponding year. The dependent variables are indicators of whether each firm espouses the corresponding objective each year. The independent variable is the fraction of the firms' assets in the same FF30 industry that receives at least one takeover bid; data is available 1962-2001. All variables are calculated as 5-year differences. Inclusion of year and industry (Fama-French 30) fixed effects are indicated underneath. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Newey-West standard errors are in brackets.

	(1) Risk Mgt	(2) Mkt Shr Growth	(3) Innovation	(4) Ethics	(5) ESG Envir	(6) ESG Social
Takeover Pressure	0.194**	-0.072	0.193*	-0.007	0.017	0.041
	(0.088)	(0.103)	(0.103)	(0.064)	(0.076)	(0.067)
Year FE	Y	Y	Y	Y	Y	Y
Industry FE	N	N	N	N	N	N
R-squared	0.001	0.000	0.001	0.000	0.000	0.000
Observation	3,381	3,381	3,381	3,381	3,381	3,381

	(7) Philanthropy	(8) Supplier	(9) Employee	(10) Customer	(11) Community	(12) Stakeholder
Takeover Pressure	-0.037	0.066	0.141	-0.023	0.017	0.012
	(0.048)	(0.047)	(0.096)	(0.109)	(0.077)	(0.008)
Year FE	Y	Y	Y	Y	Y	Y
Industry FE	N	N	N	N	N	N
R-squared	0.000	0.000	0.001	0.000	0.000	0.000
Observation	3,381	3,381	3,381	3,381	3,381	3,381

Table 9a. Compensation Metric and Shareholder Letter Objective: Levels

The sample includes the largest 120 non-financial Fortune 500 firms by sales and the largest 30 financial firms that provide a proxy statement (also known as DEF-14A) identified through the SEC EDGAR database for the years 2008, 2013, 2018, and 2020. The dependent variables are the percentage of objectives adopted by each firm in their proxy statement as compensation metrics for the CEOs, identified in the Compensation Discussion & Analysis section. The independent variables are indicators equal to 1 if the respective objective is present in the annual letter to shareholders. We control for the years 2008, 2013, and 2018 by creating dummy variables. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Standard errors are in brackets.

	(1) Risk Management	(2) Innovation	(3) Ethics	(4) ESG-Environment	(5) ESG Social	(6) Employee	(7) Customer	(8) Stakeholder	(9) Community	(10) Supplier
Objectives	0.410	-0.110	-0.003	0.086***	0.098*	0.038	0.053	0.013	0.014**	-0.030***
	(0.039)	(0.109)	(0.026)	(0.026)	(0.053)	(0.087)	(0.119)	(0.029)	(0.007)	(0.011)
2013	0.020	-0.105*	-0.008	0.030	-0.014	-0.114	-0.243***	-0.005	0.012	0.008
	(0.019)	(0.054)	(0.015)	(0.038)	(0.062)	(0.076)	(0.082)	(0.029)	(0.013)	(0.020)
2018	0.002	0.212**	-0.005	0.050	0.037	0.311**	0.069	-0.014	-0.004*	0.002
	(0.003)	(0.098)	(0.017)	(0.043)	(0.074)	(0.126)	(0.121)	(0.029)	(0.002)	(0.014)
2020	0.110*	0.114	0.124***	-0.010	0.096	0.054	0.029	0.034	0.035**	0.033
	(0.066)	(0.076)	(0.040)	(0.025)	(0.065)	(0.078)	(0.094)	(0.034)	(0.017)	(0.022)
constant	-0.030	0.300***	0.017	0.004	0.146***	0.266***	0.260**	0.027	-0.006*	0.15
	(0.029)	(0.108)	(0.012)	(0.023)	(0.044)	(0.075)	(0.11)	(0.019)	(0.003)	(0.009)
R-squared	0.02	0.035	0.056	0.030	0.024	0.043	0.023	0.011	0.024	0.014
Observations	401	401	401	401	401	401	401	401	401	401

Table 9b: Compensation Metric and Shareholder Letter Objective: 5-year Differences

The sample includes the largest 120 non-financial Fortune 500 firms by sales and the largest 30 financial firms that provide a proxy statement (also known as DEF-14A) identified through the SEC EDGAR database for the years 2008, 2013, 2018, and 2020. The dependent variables are the percentage of objectives adopted by each firm in their proxy statement as compensation metrics for the CEOs, identified in the Compensation Discussion & Analysis section. The independent variables are indicators equal to 1 if the corresponding objective is present in the annual letter to shareholders. All variables are calculated as 5-year differences. Inclusion of year fixed effects is indicated underneath. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Standard errors are in brackets.

	(1) Risk Management	(2) Product Dev. & Innov.	(3) Ethics	(4) ESG Environment	(5) ESG Social	(6) Employee	(7) Customer	(8) Stakeholder	(9) Community	(10) Supplier
Letter Objectives	0.004	0.063	0.002	0.004	-0.017	-0.207	-0.101	0.112	0.025	0.003
	(0.005)	(0.070)	(0.009)	(0.036)	(0.122)	(0.184)	(0.261)	(0.080)	(0.025)	(0.005)
Constant	0.000	0.092	0.002	0.026	-0.015	0.192**	0.061	-0.029	-0.002	-0.002
	(0.016)	(0.074)	(0.014)	(0.029)	(0.048)	(0.090)	(0.087)	(0.035)	(0.013)	(0.016)
Year FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
R-Squared	0.018	0.109	0.015	0.008	0.015	0.130	0.103	0.034	0.032	0.014
Observations	114	114	114	114	114	114	114	114	114	114

Table 10: BRT Regression Analysis

The sample includes the largest 120 non-financial Fortune 500 firms by sales and the largest 30 financial firms that provide a proxy statement (also known as DEF-14A) identified through the SEC EDGAR database for 2018 and 2020. Here we study the effect of the 2019 Business Round Table (BRT) conference on the pay structure of these firms before and after signing the BRT resolution. The dependent variables represent the existence of some form of Non-Financial Metrics. The BRT dummy is 1 if the company signed the 2019 BRT resolution. The 2020 dummy is 1 if the year is 2020. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Standard errors are in brackets.

	(1)	(2)	(3)	(4)	(5)
	Any Kind of NF	**Purely NF Metrics**	**Social NF Metrics**	**Stakeholder-based NF Metrics**	**Performance-Based NF Metrics**
2020 Dummy	-0.070	-0.133	0.019	-0.103	-0.027
	(0.087)	(0.087)	(0.077)	(0.086)	(0.080)
BRT Dummy	-0.016	-0.037	0.019	-0.059	0.012
	(0.084)	(0.084)	(0.075)	(0.083)	(0.078)
2020 Dummy * BRT Dummy	0.235*	0.266**	0.262**	0.304**	0.225**
	(0.120)	(0.120)	(0.106)	(0.118)	(0.111)
Constant	0.523***	0.462***	0.200***	0.415***	0.262***
	(0.061)	(0.061)	(0.054)	(0.060)	(0.057)
R-squared	0.026	0.027	0.073	0.035	0.042
Observations	272	272	272	272	272

Table 11: Sustainalytics Regression

The table constitutes regressions of Sustainalytics ESG weighted scores as the dependent variables. Sustainalytics rates companies on Environment, Social, and Governance (ESG) performance and assigns a score between 0-100, with 100 representing the best possible rating. Environmental Fines Score is a relative measure of how less the company is subject to environmental fines and non-monetary sanctions. The social score is a weighted composition of how well a company performs on employee welfare, public policy, fair trade, and other societal metrics. Donation (as a percentage of net earnings) is a relative score of how much a company donates to philanthropic causes out of its net earnings. Employee turnover is a score measuring how less likely is turnover among a firm's employees. Total ESG score is a weighted score of all Environmental, Social, and Governance metrics. The sample ranges from 2010-to 2020. We regress the scores against the corresponding objectives that companies espouse in their annual reports. All specifications use Industry and Year Fixed Effects. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Robust standard errors are in brackets.

	(1) Total ESG Score	(2) Environmental Fines Score	(3) Social Score	(4) Donation % of Net Earnings	(5) Employee Turnover
ESG Environment$_{t-1}$	1.802***	-0.026			
	(0.550)	(0.034)			
ESG Social$_{t-1}$			2.633***		
			(0.650)		
Philanthropy$_{t-1}$				0.080*	
				(0.041)	
Employee$_{t-1}$					-0.041
					(0.026)
Constant	60.650***	0.816***	57.880***	0.578***	0.162***
	(0.353)	(0.023)	(0.360)	(0.022)	(0.024)
Industry and Year FE	Y	Y	Y	Y	Y
R-squared	0.380	0.378	0.441	0.152	0.390
Observations	799	789	798	564	789

Table 12a: Firm Objectives and Long-Term Survival

The table shows the regression of bankruptcy and acquisition indicators against the objectives espoused by the firms in their letter to shareholders. Bankruptcy data is taken from Moody's Default and Recovery Database. Acquisition data is from Security Data Company's Mergers and Acquisition database. Columns 1-2 have the variable indicating whether a company goes bankrupt in the next 5 years as the dependent variable. Columns 3-4 have the variable indicating whether a company gets acquired in the next 5-years as the dependent variable. Columns 1 and 3 have the narrow definition of shareholder value, whereas columns 2 and 4 use the broad definition of shareholder value as an independent variable. All specifications use Fama-French industry fixed effects and year fixed effects. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Newey West standard errors are in parentheses.

	(1) Bankruptcy within 5-years	(2) Bankruptcy within 5-years	(3) Acquistion within 5-years	(4) Acquistion within 5-years
Risk Management	0.011**	0.010**	0.003	0.003
	(0.004)	(0.004)	(0.002)	(0.002)
Shareholder Value Narrow	-0.006		0.002	
	(0.005)		(0.003)	
Shareholder Value Broad		0.008*		-0.001
		(0.005)		(0.001)
Innovation	-0.015**	-0.015**	-0.000	-0.000
	(0.007)	(0.007)	(0.002)	(0.002)
Market Share Growth	0.008	0.004	-0.000	0.000
	(0.007)	(0.007)	(0.001)	(0.001)
ESG Environment	-0.003	-0.003	-0.001	-0.001
	(0.005)	(0.005)	(0.002)	(0.002)
ESG Social	-0.000	-0.000	0.002	0.002
	(0.006)	(0.006)	(0.003)	(0.003)
Stakeholder	-0.004	-0.004	0.012	0.012
	(0.006)	(0.006)	(0.010)	(0.010)
Ethics	-0.002	-0.002	-0.001	-0.001
	(0.006)	(0.006)	(0.002)	(0.002)
Philanthropy	0.013	0.013	-0.003	-0.003
	(0.009)	(0.009)	(0.002)	(0.002)
Supplier	-0.003	-0.003	0.002	0.002
	(0.006)	(0.006)	(0.004)	(0.004)
Employee	0.002	0.001	0.002	0.002
	(0.005)	(0.005)	(0.002)	(0.002)
Customer	0.004	0.001	0.000	0.001
	(0.005)	(0.006)	(0.001)	(0.001)
Community	-0.006	-0.006	-0.001	-0.001
	(0.006)	(0.006)	(0.003)	(0.003)
Profitability	-0.078**	-0.076**	-0.012	-0.013
	(0.031)	(0.031)	(0.008)	(0.008)
Leverage	0.013	0.013	-0.014*	-0.014*
	(0.020)	(0.020)	(0.008)	(0.008)
FF30-FE and Year-FE	Y	Y	Y	Y
R-squared	0.056	0.056	0.038	0.038
Observations	5,952	5,952	5,952	5,952

Table 12b: Firm Objectives and Long-Term Performance

The regressions below show the relationship between firm 5-year performance (measured in different ways) and the objectives that firms espoused in the annual letters. Asset growth, revenue growth, cumulative stock returns, and average ROA are calculated over 5-year rolling windows. The independent variables are lagged by 5 years. Columns 1-4 use the narrow definition of Shareholder Value, while columns 5-8 use the broad definition. All specifications have Fama-French industry fixed effects and year fixed effects. ***, **, and * indicate significance at the 1%, 5%, and 10% levels respectively. Newey-West SE in parentheses.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Asset Growth	**Revenue Growth**	**Cumulative Stock Return**	**Average ROA**	**Asset Growth**	**Revenue Growth**	**Cumulative Stock Return**	**Average ROA**
Risk Management	-0.119*	-0.167***	0.004	-0.002*	-0.141**	-0.178***	-0.008	-0.002*
	(0.066)	(0.052)	(0.043)	(0.001)	(0.072)	(0.054)	(0.046)	(0.001)
Shareholder Value Narrow	-0.184**	-0.090	-0.048	-0.000				
	(0.075)	(0.056)	(0.049)	(0.002)				
Shareholder Value Broad					-0.027	-0.014	0.112*	-0.001
					(0.060)	(0.060)	(0.058)	(0.001)
Innovation	0.071	0.020	-0.014	0.000	0.067	0.019	-0.012	0.000
	(0.048)	(0.060)	(0.041)	(0.001)	(0.048)	(0.061)	(0.041)	(0.001)
Market Share Growth	-0.029	-0.058	-0.043	-0.002	-0.015	-0.051	-0.093	-0.001
	(0.051)	(0.057)	(0.053)	(0.001)	(0.059)	(0.061)	(0.069)	(0.001)
ESG Environment	0.022	0.062	-0.026	0.004**	0.018	0.060	-0.026	0.004**
	(0.082)	(0.062)	(0.045)	(0.002)	(0.082)	(0.062)	(0.044)	(0.002)
ESG Social	-0.145	-0.098*	0.036	-0.001	-0.145	-0.098*	0.035	-0.001
	(0.100)	(0.053)	(0.052)	(0.001)	(0.100)	(0.053)	(0.052)	(0.001)
Stakeholder	-0.061	-0.205**	-0.123	-0.010***	-0.056	-0.202**	-0.120	-0.010***
	(0.096)	(0.101)	(0.087)	(0.003)	(0.096)	(0.101)	(0.087)	(0.003)
Ethics	-0.067	-0.136**	0.033	0.000	-0.079	-0.142**	0.034	0.000
	(0.073)	(0.066)	(0.052)	(0.002)	(0.074)	(0.065)	(0.052)	(0.002)
Philanthropy	0.075	-0.034	-0.017	-0.001	0.073	-0.035	-0.019	-0.001
	(0.135)	(0.074)	(0.084)	(0.002)	(0.135)	(0.074)	(0.084)	(0.002)
Supplier	-0.043	-0.011	-0.029	-0.003	-0.036	-0.008	-0.028	-0.003
	(0.093)	(0.073)	(0.069)	(0.002)	(0.093)	(0.073)	(0.069)	(0.002)
Employee	0.071	0.152***	0.016	0.001	0.062	0.147**	0.014	0.001
	(0.063)	(0.059)	(0.034)	(0.001)	(0.061)	(0.058)	(0.034)	(0.001)
Customer	-0.005	-0.085*	-0.022	-0.002*	-0.003	-0.083	-0.054	-0.002
	(0.054)	(0.046)	(0.038)	(0.001)	(0.063)	(0.054)	(0.040)	(0.002)
Community	0.011	0.067	0.048	0.002	0.011	0.067	0.047	0.002
	(0.085)	(0.062)	(0.076)	(0.002)	(0.085)	(0.062)	(0.076)	(0.002)
Profitability	2.421***	1.624***	-1.784***	0.325***	2.442***	1.634***	-1.753***	0.325***
	(0.473)	(0.497)	(0.479)	(0.015)	(0.473)	(0.496)	(0.474)	(0.015)
Leverage	-0.908***	-0.327	-0.285	-0.052***	-0.910***	-0.328	-0.284	-0.052***
	(0.282)	(0.260)	(0.262)	(0.006)	(0.283)	(0.261)	(0.262)	(0.006)
Constant	-0.295	-0.335	0.352	-0.060***	-0.292	-0.331	0.339	-0.060***
	(0.300)	(0.440)	(0.221)	(0.019)	(0.308)	(0.454)	(0.219)	(0.019)
FF30-FE	Y	Y	Y	Y	Y	Y	Y	Y
Year-FE	Y	Y	Y	Y	Y	Y	Y	Y
R-squared	0.070	0.130	0.119	0.465	0.068	0.129	0.119	0.466
Observations	5,850	5,859	4,707	5,952	5,850	5,859	4,707	5,952

Appendix 1

List of Companies

Company Name	First Obs	Last Obs	Total Obs
3M CO	1959	2020	62
7-ELEVEN INC	1977	1992	16
ABBOTT LABORATORIES	1992	2020	29
ABBVIE INC	2014	2020	7
ADVANCEPCS	2002	2003	2
AEROJET ROCKETDYNE HOLDINGS	1958	1968	11
AETNA INC	1955	2017	58
AHMANSON (H F) & CO	1976	1993	12
ALBERTSON'S INC	1985	2020	26
ALCOA INC	1955	2015	60
ALLEGHENY TECHNOLOGIES INC	1969	1970	2
ALLEGIS	1987	1987	1
ALLIED STORES	1955	1986	19
ALLIS-CHALMERS ENERGY INC	1955	1966	7
ALLSTATE CORP	1998	2006	9
ALLY FINANCIAL INC	2007	2012	6
ALPHABET INC	2007	2020	14
ALTRIA GROUP INC	1973	2020	37
AMAX INC	1955	1963	9
AMAZON.COM INC	2008	2020	13
AMERICAN AIRLINES GROUP INC	1983	2019	37
AMERICAN CYANAMID CO	1955	1967	13
AMERICAN ELECTRIC POWER CO	1982	2004	7
AMERICAN EXPRESS CO	1971	2019	36
AMERICAN FINANCIAL CORP	1988	1990	3
AMERICAN GENERAL CORP	1998	2000	3
AMERICAN INTERNATIONAL GROUP	1988	2020	33
AMERICAN MOTORS CORP	1955	1976	15
AMERICAN STORES CO	1976	1998	23
AMERICAN STORES CO -OLD	1955	1975	21
AMERICAN TRUST	1955	1959	5
AMERISOURCEBERGEN CORP	2001	2020	20
AMERITECH CORP	1984	1998	15
AMGEN INC	2014	2020	7
AMOCO CORP	1955	1997	43
ANACONDA CO	1955	1969	15
ANDEAVOR	2005	2017	13
ANDERSON CLAYTON & CO	1955	1963	9
ANHEUSER-BUSCH COS INC	1982	2007	23
ANTHEM INC	2005	2020	16
APPLE INC	1993	2020	19
APTIV PLC	2000	2008	9
AQUILA INC	1998	2001	4
ARCHER-DANIELS-MIDLAND CO	1984	2020	35
ARMCO INC	1955	1982	28
ARMOUR	1955	1969	15
ARROW ELECTRONICS INC	2010	2020	11
ASARCO INC	1955	1957	3
ASHLAND GLOBAL HOLDINGS INC	1968	1997	29
AT&T CORP	1955	2004	50
AT&T INC	1955	2020	66
AT&T WIRELESS SERVICES INC	2002	2003	2
ATCHISON TOPEKA & SANTA FE RAILWAY	1955	1964	10
ATLANTIC RICHFIELD CO	1955	1999	43
AUTONATION INC	1998	2020	15
AVATEX CORP	1955	1979	25
AVCO CORP	1967	1968	2
AVIS BUDGET GROUP INC	2002	2005	4
AVNET INC	2009	2017	9
AXA FINANCIAL INC	1994	1994	1
BAKER HUGHES CO	2019	2020	2
BAKER HUGHES INC	2011	2014	4
BALTIMORE & OHIO RAILROAD	1955	1957	3
BANK OF AMERICA CORP	1966	2020	35
BANK OF NEW YORK MELLON CORP	1988	2020	17
BANK ONE CORP	1991	2003	13
BANKAMERICA CORP-OLD	1955	1997	40
BANKBOSTON CORP	1955	1989	33
BANKERS TRUST CORP	1955	1998	44
BATUS	1982	1985	4
BAXTER INTERNATIONAL INC	1986	1995	10
BEAM INC	1955	1994	34
BEAR STEARNS COMPANIES INC	1993	2007	15
BEATRICE	1968	1988	20
BELLSOUTH CORP	1984	2005	22
BENDIX CORP	1955	1981	27
BERGEN BRUNSWIG CORP -CL A	1995	2000	6
BERKSHIRE HATHAWAY	1996	2020	24
BEST BUY CO INC	2001	2020	20
BESTFOODS	1958	1996	25
BETHLEHEM STEEL CORP	1955	1985	31
BICOASTAL CORP	1959	1975	17
BLACKROCK INC	2009	2017	9
BOEING CO	1955	2020	66
BP AMERICA INC	1987	1987	1
BRIGHTHOUSE FINANL INC	2018	2020	3
BRISTOL-MYERS SQUIBB CO	1987	2020	30
BROADCOM INC	2019	2020	2
BURLINGTON INDUSTRIES INC	1955	1974	20
BURLINGTON NORTHERN SANTA FE	1980	2008	7
BURNS INTL SERVICES CORP	1955	1967	13
C & S SOVRAN CORP	1990	1990	1
CAMPBELL SOUP CO	1955	1963	9
CAPITAL ONE FINANCIAL CORP	2006	2020	14
CARDINAL HEALTH INC	1997	2020	24
CAREMARK RX INC	2004	2006	3
CARGILL	1991	1991	1
CARMAX	2020	2020	1
CATERPILLAR INC	1955	2020	66
CBRE GROUP INC	2018	2020	3
CBS CORP -OLD	1955	1995	41
CBS INC	1977	1980	4
CELANESE CORP-OLD	1964	1969	6
CENTENE CORP	2015	2020	6
CENTERPOINT ENERGY INC	1998	2001	4
CERIDIAN CORP	1982	1984	3
CHAMPION INTERNATIONAL CORP	1966	1985	16
CHARTER COMMUNICATIONS INC	2016	2020	5
CHASE MANHATTAN CORP -OLD	1955	1994	40
CHEMICAL CORN EXCHANGE BANK	1955	1959	5
CHESAPEAKE ENERGY CORP	2014	2014	1
CHESSIE SYSTEM INC	1955	1965	4
CHEVRON CORP	1955	2020	66
CHIQUITA BRANDS INTL INC	1969	1979	8
CHRYSLER CORP	1955	1997	43
CHRYSLER GROUP LLC	2010	2010	1

Company Name	First Obs	Last Obs	Total Obs
CHS INC	2007	2020	14
CIGNA CORP	1955	2020	62
CIRCUIT CITY STORES	2002	2002	1
CISCO SYSTEMS INC	1999	2020	22
CITICORP	1955	1997	43
CITIES SERVICE CO	1955	1993	31
CITIGROUP GLOBAL MKTS HLDGS	1981	1985	5
CITIGROUP INC	1993	2020	28
CITY INVESTING CO	1982	1983	2
COCA-COLA CO	1961	2020	59
COCA-COLA EUROPACIFIC PARTNE	1997	2009	13
COLGATE-PALMOLIVE CO	1957	1987	30
COLLEGE RETIREMENT EQUITIES FUND	1995	1996	2
COLONIAL STORES	1955	1958	4
COLUMBIA ENERGY GROUP	1960	1983	5
COMCAST CORP	2003	2020	18
COMMONWEALTH EDISON CO	1983	1987	4
COMMUNITY HEALTH SYSTEMS INC	2014	2016	3
COMPAQ COMPUTER CORP	1994	2001	8
COMPUTER SCIENCES	2004	2009	3
CONAGRA BRANDS INC	1985	2005	21
CONOCO INC	1999	2001	3
CONOCO INC-OLD	1955	1980	26
CONOCOPHILLIPS	1955	2019	65
CONSOLIDATED EDISON INC	1955	1986	27
CONSTELLATION ENERGY GRP INC	2005	2009	5
CONTINENTAL BANK CORP	1955	1987	33
CONTINENTAL GROUP INC	1955	1983	29
COSTCO WHOLESALE CORP	1992	2020	29
COUNTRYWIDE FINANCIAL CORP	2004	2007	4
COVANTA ENERGY CORP	1956	1968	3
CROCKER NATIONAL CORP-OLD	1959	1984	26
CROWN ZELLERBACH	1955	1964	10
CSX CORP	1980	1997	17
CUMMINS INC	2015	2020	5
CURTISS-WRIGHT CORP	1955	1957	3
CVS HEALTH CORP	1986	2020	34
D R HORTON INC	2020	2020	1
DANA INC	1998	1999	2
DANAHER CORP	2014	2020	4
DEERE & CO	1958	2020	48
DELL TECHNOLOGIES INC	1997	2020	21
DELTA AIR LINES INC	1988	2019	32
DIGITAL EQUIPMENT	1984	1997	14
DIRECTV	2007	2014	8
DISNEY (WALT) CO	1992	2020	29
DOLLAR GENERAL CORP	2015	2020	6
DOLLAR TREE INC	2016	2020	5
DOMINION ENERGY INC	2004	2006	3
DOUGLAS AIRCRAFT INC	1955	1966	11
DOW INC	2019	2020	2
DRESSER INDUSTRIES INC	1977	1982	6
DU PONT (E I) DE NEMOURS	1955	2016	62
DUKE ENERGY CORP	1997	2020	19
DUPONT DE NEMOURS INC	1955	2020	65
DXC TECHNOLOGY	2018	2018	1
DYNEGY INC	1997	2001	5
EASTMAN KODAK CO	1955	2003	48
EDISON INTERNATIONAL	1988	1994	6
EL PASO CGP CO	1976	1996	18
EL PASO CORP	1982	2003	6
ELECTRONIC DATA SYSTEMS CORP	1991	2007	14
EMC CORP/MA	2011	2015	5
EMERSON ELECTRIC CO	1986	2016	31
ENERGY FUTURE HOLDINGS CORP	1998	2002	5
ENERGY TRANSFER LP	2013	2020	8
ENRON CORP	1982	2001	19
ENTERGY CORP	1998	1998	1
ENTERPRISE GP HOLDINGS LP	2007	2009	3
ENTERPRISE PRODCT PARTNRS LP	2010	2020	11
EQUITABLE HOLDINGS INC	1955	2020	39
ESMARK INC-OLD	1955	1980	26
EXELON CORP	2001	2020	20
EXPRESS SCRIPTS HOLDING CO	2002	2017	16
EXXON MOBIL CORP	1955	2020	66
FACEBOOK INC	2016	2020	5
FARMLAND INDUSTRIES INC	1977	1996	9
FEDERAL HOME LOAN MORTG CORP	1991	2020	27
FEDERAL NATIONAL MORTGA ASSN	1980	2020	38
FEDEX CORP	1990	2020	31
FIFTH THIRD BANCORP	2020	2020	1
FINANCIAL CORP OF AMERICA	1983	1986	4
FIRESTONE TIRE & RUBBER CO	1955	1981	27
FIRST BOSTON INC	1983	1987	5
FIRST CHICAGO CORP	1955	1994	40
FIRST CHICAGO NBD CORP	1955	1997	24
FIRST INTERSTATE BNCP	1969	1993	25
FIRST NATIONAL STORES INC	1955	1964	10
FIRST REPUBLICBANK CORP	1987	1987	1
FLAGSTAR CORP	1973	1981	9
FLEETBOSTON FINANCIAL CORP	1991	2003	11
FLEMING COMPANIES INC	1983	2002	20
FLUOR CORP	1981	2014	19
FMC CORP	1963	1978	15
FOOT LOCKER INC	1955	1994	40
FORD MOTOR CO	1955	2020	66
FOREMOST DAIRIES	1955	1955	1
FRANKLIN NATIONAL BANK	1967	1968	2
FREEPORT-MCMORAN INC	2007	2014	5
GAMBLE-SKOGMO	1968	1971	4
GAP INC	2000	2006	7
GENERAL DYNAMICS CORP	1955	2020	56
GENERAL ELECTRIC CO	1955	2020	66
GENERAL FOODS CORP	1955	1985	31
GENERAL MILLS INC	1955	1994	24
GENERAL MOTORS CO	1955	2020	66
GENESCO INC	1969	1970	2
GENON ENERGY INC	2001	2001	1
GEORGIA-PACIFIC CORP	1969	2004	35
GETTY OIL CO	1967	1983	14
GILEAD SCIENCES INC	2014	2020	7
GLOBAL PARTNERS LP	2013	2013	1
GOLDEN WEST FINANCIAL CORP	2005	2005	1
GOLDMAN SACHS GROUP INC	1999	2020	22
GOODRICH CORP	1955	1974	18
GOODYEAR TIRE & RUBBER CO	1955	2013	59

Company Name	First Obs	Last Obs	Total Obs
GRACE (W R) & CO	1955	1989	32
GRAND UNION CO -OLD	1957	1967	10
GRANT (W.T.) CO	1958	1973	16
GRAYBAR ELECTRIC	1955	1957	3
GREAT ATLANTIC & PAC TEA CO	1955	1994	40
GREAT WESTERN FINANCIAL	1984	1985	2
GRUMMAN CORP	1965	1969	5
GTE CORP	1958	1999	42
GUARANTY TRUST OF NEW YORK	1955	1958	4
GULF CORP	1955	1983	29
HALLIBURTON CO	1981	2019	24
HANCOCK JOHN FINL SVCS INC	1955	2003	33
HANSON INDUSTRIES NORTH AMERICA	1988	1993	4
HARTFORD FINANCIAL SERVICES	1994	2017	24
HCA HEALTHCARE INC	1994	2020	27
HEALTH NET INC	2009	2009	1
HESS CORP	1971	2014	28
HEWLETT PACKARD ENTERPRISE	2016	2020	5
HEXION INC	1955	1991	33
HILLSHIRE BRANDS CO	1965	2006	41
HOLLYFRONTIER CORP	2012	2013	2
HOME DEPOT INC	1993	2020	28
HONEYWELL INC	1962	1990	28
HONEYWELL INTERNATIONAL INC	1955	2020	66
HOST HOTELS & RESORTS INC	1986	1992	7
HP INC	1982	2020	39
HSBC FINANCE CORP	1970	1985	16
HUMANA INC	2006	2020	15
IBP INC	1978	2000	12
ICAHN ENTERPRISES LP	2013	2013	1
IKON OFFICE SOLUTIONS	1995	1996	2
INA CORP	1977	1978	2
INGRAM MICRO INC	1996	2015	20
INTEL CORP	1993	2020	28
INTERFIRST CORP	1979	1983	5
INTL BUSINESS MACHINES CORP	1955	2020	66
INTL PAPER CO	1955	2020	62
IRVING BANK CORP	1955	1982	28
ITT INC	1955	1995	40
JABIL INC	2018	2020	3
JEWEL COS INC	1958	1983	25
JOHNSON & JOHNSON	1975	2020	46
JOHNSON CONTROLS INTL PLC	1996	2015	20
JPMORGAN CHASE & CO	1960	2020	62
KENNECOTT CORP	1955	1957	3
KEYCORP	1994	1994	1
KIMBERLY-CLARK CORP	1995	2014	20
KOHL'S CORP	2007	2015	6
KRAFT GENERAL FOODS	1955	1987	33
KRAFT HEINZ CO	2016	2020	5
KROGER CO	1955	2020	66
L3 TECHNOLOGIES INC	2009	2009	1
LEAR CORP	1999	2018	10
LEHMAN BROTHERS HOLDINGS INC	1994	2007	14
LENNAR CORP	2006	2020	3
LILLY (ELI) & CO	2005	2020	15
LINCOLN NATIONAL CORP	1998	2020	21
LITTON INDUSTRIES INC	1964	1984	21
LOCKHEED MARTIN CORP	1955	2020	66
LOWE'S COS INC	1998	2020	23
LTV CORP	1967	1989	23
LTV STEEL CO INC	1955	1966	12
LUCENT TECHNOLOGIES INC	1997	2002	6
LUCKY STORES INC	1969	1987	19
LUMEN TECHNOLOGIES INC	2018	2020	3
LYKES CORP-DEL	1955	1965	11
LYONDELL CHEMICAL CO	2005	2006	2
MACY (R H) & CO	1955	1990	8
MACY'S INC	1955	2019	59
MANPOWERGROUP	2004	2018	15
MANUFACTURERS HANOVER CORP	1955	1990	42
MARATHON OIL CORP	1974	2010	18
MARATHON PETROLEUM CORP	2011	2020	10
MARCOR INC	1968	1976	9
MARINE MIDLAND BANKS	1969	1983	15
MARRIOTT INTL INC	1994	2017	5
MARTIN MARIETTA CORP	1958	1994	10
MASSACHUSETTS MUTUAL LIFE INSURANCE	1955	2020	34
MAY DEPARTMENT STORES CO	1955	2004	36
MCCRORY PARENT CORP	1969	1976	8
MCDERMOTT	1982	1982	1
MCDONALD'S CORP	1994	2017	24
MCDONNELL DOUGLAS CORP	1958	1996	34
MCI INC	1989	2004	14
MCKESSON CORP	1955	2020	48
MEDCO HEALTH SOLUTIONS INC	2003	2011	9
MELLON FINANCIAL CORP	1955	1987	33
MERCK & CO	1988	2020	33
MERRILL LYNCH & CO INC	1981	2008	28
METLIFE INC	1955	2020	66
MEYER (FRED) INC	1998	1998	1
MICRON TECHNOLOGY INC	2018	2020	3
MICROSOFT CORP	1997	2020	24
MOBIL CORP	1955	1998	44
MONDELEZ INTERNATIONAL INC	2007	2020	14
MONEYGRAM INTERNATIONAL INC	1970	1982	13
MONTGOMERY WARD HLDG -CL A	1955	1985	22
MORGAN (J P) & CO	1959	1999	41
MORGAN STANLEY	1986	2020	35
MORRELL JOHN	1960	1963	4
MOTOROLA SOLUTIONS INC	1984	2010	27
MURPHY OIL CORP	2007	2012	6
MUTUAL BENEFIT LIFE	1955	1966	12
MUTUAL OF NEW YORK	1955	1968	14
NABISCO BRANDS INC	1981	1984	4
NABISCO GROUP HOLDINGS CORP	1955	1998	44
NABISCO INC	1955	1957	3
NATIONAL CITY CORP	1998	2005	6
NATIONAL TEA CO	1955	1972	18
NATIONWIDE	1997	2020	19
NAVIENT CORP	2008	2013	6
NAVISTAR INTERNATIONAL CORP	1955	1982	28
NCR CORP	1964	1988	15
NETFLIX INC	2020	2020	1
NEW ENGLAND MUTUAL LIFE	1955	1968	14
NEW YORK CENTRAL RAILROAD	1955	1965	11

Company Name	First Obs	Last Obs	Total Obs
NEW YORK LIFE INSURANCE	1955	2020	60
NEXTERA ENERGY INC	1988	2009	3
NGL ENERGY PARTNERS	2019	2020	2
NIKE INC -CL B	2008	2020	13
NL INDUSTRIES	1955	1965	11
NORTHROP GRUMMAN CORP	1985	2020	24
NORTHWEST AIRLINES CORP	1989	1996	8
NORTHWESTERN MUTUAL LIFE INS	1955	2020	43
NOV INC	2012	2014	3
NUCOR CORP	2007	2020	8
NYNEX CORP	1984	1996	13
O-I GLASS INC	1956	1979	24
OCCIDENTAL PETROLEUM CORP	1968	2019	43
OFFICEMAX INC	1969	1972	4
OLD COPPER CO INC	1955	2010	56
OLIN CORP	1955	1966	12
ORACLE CORP	2007	2020	14
PACCAR INC	2006	2019	4
PACIFIC TELESIS GROUP	1984	1995	12
PAN AM CORP	1966	1980	4
PARAMOUNT COMMUNICATIONS INC	1968	1983	16
PAYPAL HOLDINGS INC	2020	2020	1
PBF ENERGY INC	2012	2019	5
PENN CENTRAL CO	1955	1975	21
PENN MUTUAL LIFE	1955	1958	4
PENSKE AUTOMOTIVE GROUP INC	2015	2020	6
PEPSIAMERICAS INC	1979	1985	3
PEPSICO INC	1973	2020	48
PERFORMANCE FOOD GROUP CO	2020	2020	1
PFIZER INC	1991	2020	29
PG&E CORP	1955	2002	40
PHARMACIA CORP	1955	2002	43
PHELPS DODGE CORP	1956	1956	1
PHILCO	1955	1955	1
PHILIP MORRIS INTERNATIONAL	2008	2020	13
PHILLIPS 66	2012	2020	9
PILLSBURY CO	1986	1988	3
PLAINS ALL AMER PIPELNE -LP	2004	2012	9
PLAINS GP HOLDINGS LP	2013	2020	8
PNC FINANCIAL SVCS GROUP INC	1987	2020	20
PPG INDUSTRIES INC	1955	1968	14
PREMCOR INC	2004	2004	1
PRIMERICA INC	1955	1981	27
PRINCIPAL FINANCIAL GRP INC	2004	2020	11
PROCTER & GAMBLE CO	1955	2020	66
PRUDENTIAL FINANCIAL INC	1955	2020	66
PUBLIX SUPER MARKETS INC	1994	2020	27
PULTEGROUP INC	2005	2005	1
PURE OIL	1955	1963	9
QUALCOMM INC	2012	2020	9
QWEST COMMUNICATION INTL INC	1984	2003	17
RALSTON PURINA CO	1955	1993	37
RAYTHEON CO	1959	2019	55
RAYTHEON TECHNOLOGIES CORP	1955	2020	66
RCA CORP	1955	1985	31
REGIONS FINANCIAL CORP	2008	2009	2
REPUBLIC AVIATION	1955	1955	1
REPUBLIC STEEL CORP	1955	1981	26
REVLON GROUP INC	1955	1976	22
REYNOLDS METALS CO	1955	1974	7
RITE AID CORP	1998	2020	22
ROCKWELL AUTOMATION	1955	1997	43
RYERSON HOLDING CORP	1955	1979	22
SAFEWAY INC	1955	2014	60
SALESFORCE.COM INC	2020	2020	1
SALOMON	1986	1996	11
SANTA FE PACIFIC CORP	1955	1987	23
SCHERING-PLOUGH	2008	2008	1
SCHWAB (CHARLES) CORP	2016	2020	5
SEARS HOLDINGS CORP	1964	2016	53
SEARS ROEBUCK & CO	1955	2004	50
SECURITY PACIFIC CORP	1955	1991	37
SEMPRA ENERGY	1982	1990	8
SHELL OIL CO	1955	1993	39
SIGNAL COS	1966	1984	16
SINCLAIR OIL CORP	1955	1968	14
SOLECTRON CORP	2000	2001	2
SOUTHERN CALIFORNIA EDISON	1982	1987	4
SOUTHERN CO	1977	2020	26
SOUTHWEST AIRLINES	2015	2019	5
SPARTANS INDUSTRIES INC	1966	1967	2
SPELLING ENTERTNMT GRP INC	1979	1983	4
SPERRY CORP	1955	1985	31
SPRINT CORP	1988	2012	25
ST REGIS CORP	1959	1962	4
STANDARD BRANDS	1955	1958	4
STANDARD OIL CO	1969	1986	17
STAPLES INC	2003	2016	14
STARBUCKS CORP	2015	2020	6
STATE FARM INSURANCE	1994	2020	26
STATE STREET CORP	2008	2020	13
STEVENS (J.P.) & CO	1960	1965	5
STUDEBAKER PACKARD	1955	1955	1
SUN MICROSYSTEMS INC	1999	2001	3
SUNOCO INC	1955	2011	45
SUNTRUST BANKS INC	1998	2018	20
SUPERMARKETS GEN HLDG -CL A	1985	1986	2
SUPERVALU INC	1982	2013	32
SYNNEX CORP	2019	2020	2
SYSCO CORP	1989	2020	32
TARGET CORP	1978	2020	42
TECH DATA CORP	1998	2019	22
TENET HEALTHCARE CORP	2002	2017	5
TENNECO INC	1966	1996	31
TENNESSEE GAS PIPELINE CO	1960	1965	6
TESLA INC	2018	2020	3
TEXACO INC	1955	2000	46
TEXAS COMMERCE BANCSHARES	1982	1982	1
TEXAS EASTERN CORP	1980	1985	6
TEXAS INSTRUMENTS INC	1980	1997	14
TEXTRON INC	1964	1998	28
THERMO FISHER SCIENTIFIC INC	2017	2020	4
TIAA-CREF	1986	2020	35
TIDEWATER OIL	1955	1964	10
TIME WARNER CABLE INC	2009	2015	7
TIME WARNER INC	1989	2017	25

Company Name	First Obs	Last Obs	Total Obs
TJX COS INC (THE)	1986	2020	20
TOSCO CORP	1996	2000	5
TOYS R US INC	1993	1999	6
TRANE INC	1956	1971	6
TRAVELERS CORP	1955	1992	38
TRAVELERS COS INC	2004	2004	1
TRUIST FINANCIAL CORP	2008	2020	13
TRW INC	1966	2001	36
TWENTY-FIRST CENTURY FOX INC	2004	2018	15
TYSON FOODS INC -CL A	2002	2020	19
U S BANCORP/DE-OLD	1969	1986	16
U S INDUSTRIES	1970	1973	4
U S WEST -CONSOLIDATED	1993	1996	4
ULTRAMAR DIAMOND SHAMROCK	2000	2000	1
UNILEVER US	1988	1992	5
UNION CARBIDE CORP	1955	1991	37
UNION PACIFIC CORP	1955	2018	33
UNIROYAL INC	1955	1977	23
UNISYS CORP	1985	1993	9
UNITED AIRLINES HOLDINGS INC	1962	2019	56
UNITED AIRLINES INC	1987	1989	3
UNITED CALIFORNIA BANK	1961	1968	8
UNITED NATURAL FOODS INC	2019	2020	2
UNITED PARCEL SERVICE INC	1980	2020	40
UNITED STATES STEEL CORP	1955	2012	34
UNITEDHEALTH GROUP INC	1996	2020	25
UNOCAL CORP	1956	1993	31
US BANCORP	2001	2020	20
US FOODS HOLDING CORP	2013	2020	8
USX CORP-CONSOLIDATED	1982	2000	19
VALERO ENERGY CORP	2000	2020	21
VARITY CORP	1955	1955	1
VERIZON COMMUNICATIONS INC	1984	2020	37
VIACOMCBS INC	1995	2020	12
VISA INC	2019	2020	2
VISTEON CORP	2001	2005	5
VOYA FINANCIAL INC	2014	2017	4
WACHOVIA CORP	1991	2007	17
WALGREENS BOOTS ALLIANCE INC	1992	2020	29
WALMART INC	1983	2020	38
WARNER-LAMBERT CO	1970	1999	8
WASHINGTON MUTUAL INC	1997	2007	11
WASTE MANAGEMENT INC	1991	1999	8
WELLPOINT HEALTH NETWRKS INC	2002	2003	2
WELLS FARGO & CO	1969	2020	38
WELLS FARGO & CO -OLD	1960	1997	36
WEYERHAEUSER CO	1969	2007	37
WHIRLPOOL CORP	1973	2018	12
WILLIAMS	2003	2003	1
WILSON & CO-DEL	1955	1966	12
WINN-DIXIE STORES INC	1956	2002	46
WORLD FUEL SERVICES CORP	2008	2020	12
WYETH	1965	2008	38
XCEL ENERGY INC	2001	2001	1
XEROX HOLDINGS CORP	1969	2014	44